10. Descriptions of New Species of Carabidae (Coleoptera), with Notes and Additional Localities of some already known Species.—By the late Dr. L. Péringuey.

[AT the time of his death the late Dr. Péringuey was engaged on a Revision of his monograph of the *Carabidae*, and the following notes and descriptions were found amongst his papers, and, according to endorsements on the MSS., had been finally corrected for printing. Only such portions as were repetitions of earlier descriptions have been cut out.

The types of the new species are in the South African Museum.—Ed.]

#### FAMILY CARABIDAE.

### TRIBE PANAGAEINI.

Gen. Tefflus Latr.

Descr. Cat., p. 472.

## Key to the Species.

- A<sup>2</sup>. Size large. Abdominal segments without a puncture on each side of the centre.
  - $a^2$ . Elytra elongate-ovate.
  - $b^2$ . Pronotum very scabrose and as long as broad . . . . delegorguei  $b^1$ . Pronotum moderately scabrose, broader than long . . . molossus
- A1. Size smaller. Abdominal segments with a puncture on each side of the centre.
  - $b^2$ . Prothorax with the median line distinct but not very deep. Elytra black carinatus
  - b¹. Prothorax with the median line conspicuous. Elytra dark violaceous or purplish . . . . . . . . . . . . . . . . . violaceus

T. delegorguei Guér.

Descr. Cat., p. 473.

Locality.—Transvaal (Nylstroom, Louis Trichardt); Mozambique (Beira).

## T. kafuenus Pér.

Ann. S. Afr. Mus., vol. v, 1908, p. 284.

Distinguished by the more sub-parallel shape of the elytra in the  $\Im$ , which is much narrower than in *Delegorguei*, while in the  $\Im$  the elytra are much less constricted towards the base and less ampliated towards the middle; the prothorax is slightly broader in both sexes than in *Delegorguei*, and the median longitudinal line much more distinct; the costae and sculpture of the intervals of the elytra are much the same in all the species of the genus, but the scabrose impressions in the intervals of the costae are single in the anterior part in this  $\Im$ . Two examples, a  $\Im$  and a  $\Im$ . The former, the type of the species, is proportionally smaller than the example I take to be the  $\Im$  and much more parallel-shaped.

Length, 39-48 mm.; width, 13-19 mm.

Locality.—N.-W. Rhodesia (Kafue River); S. Rhodesia (Umtali).

### T. carinatus Kl.

Descr. Cat., p. 474.

Locality.—Mozambique (Rikatla, Beira, Tembe, Amatongas); S. Rhodesia (Melsetter).

#### Gen. Eudema Cast.

Syn: Craspedophorus Hope; Epicosmus Chaud. Descr. Cat., p. 474.

Craspedophorus, and also Epicosmus, are posterior to Eudema. Chaudoir includes in Eudema only one Indian species, whereas Castelnau founded the genus for the African and Indian species.

The difference between Craspedophorus sensu Chaud. and Epicosmus, also sensu Chaud., seems to consist in a slight variation in the securiform shape of the ultimate joint of the palpi.

## Key to the Species.

- A<sup>2</sup>. Elytra with two yellow patches on each side . . . . . Epicosmus

$\mathbb{B}^6$ .	Prothorax narrow, edges strongly recurved.
	a <sup>2</sup> . Yellow patches on the elytra extending on four costae . ornatum
	a <sup>1</sup> . Yellow patches on the elytra restricted to two (alternate) segments
	rikatlense
B <sup>5</sup> .	Prothorax broad, edges strongly recurved. Prothorax slightly attenuate
	laterally in front. Anterior and posterior bands sinuate, extending on five
	costae festivum
$B^4$ .	Prothorax not attenuate laterally in front.
	a <sup>3</sup> . Anterior and posterior bands transversely quadrate pretiosum
	$a^2$ . Anterior band extending on four costae laticollis
	a <sup>1</sup> . Anterior band extending on three alternate costae merum
$\mathbb{B}^3$ .	Prothorax hexagonal.
	$a^2$ . Elytra not convex.
	$b^2$ . Elytra sharply carinate, hind band transverse $gratiosum$
	b <sup>1</sup> . Elytra not sharply carinate, hind band arcuate nobile
	a <sup>1</sup> . Elytra gibbose. Elytra not sharply carinate, hind band transverse
	bonvouloiri
B <sup>2</sup> .	Prothorax rounded laterally. Elytra not sharply carinate, hind patch
A 1	strongly arcuate
Α.	Elytra with two discoidal bands and a humeral; three yellow patches on each side.
B1.	Prothorax broad, edges recurved sexmaculatum
	Fulama immiatum Roh

# Eudema impictum Boh.

Descr. Cat., p. 476.

Locality.—Natal; Transvaal (Lydenburg); Natal (Durban); S. Rhodesia (Salisbury, Umtali); Mozambique (Busi, Beira).

### Eudema ornatum Boh.

Descr. Cat., p. 478.

Locality.—Natal (Durban); S. Rhodesia (Umtali, Salisbury); occurs also in Zanzibar.

# Eudema difficile Chaud.

Descr. Cat., p. 479.

This species, founded on a single example from the shores of the Zambesi River, is very closely allied to *C. erichsoni* and *oxygonus*, both from the west coast of Africa. It has not been recorded again.

## Eudema festivum Klug.

Abh. Ak. Wiss. Berlin, 1832-33, p. 128, pl. i, f. 7.

This species is widely distributed. Described originally from Madagascar, it is recorded from the Comoro Island, Quango, West Africa, and now from S. Rhodesia (Umtali). It is easily differentiated

from the other South African species having a broad thorax by it being narrower at apex than at the base, more regularly ampliated laterally and not emarginate towards the basal angle; the surface is roughly and closely punctate; the sub-parallel elytra are less densely pubescent than the prothorax, moderately highly costate, with the striae finely but deeply punctate, and they have each at about one quarter of the length a yellow band extending from the 4th to the 8th costa, and consisting of three lines united alternately by two shorter inner ones; in the third posterior part is a similar patch in which the two alternate lines project more towards the apex than in the anterior patch.

Length, 19-21 mm.

Locality.—S. Rhodesia (Umtali).

Eudema bonvouloiri Chaud.

Descr. Cat., p. 478.

The characteristic gibbosity of the elytra varies in individuals of both sexes.

Locality.—Transvaal (Barberton, Three Sisters, White River, Shilouvane, Lydenburg, Woodbush, Griffin Mine, Malalane).

Gen. Trichisia Motsch.

Bull. Soc. Nat. Mosc., 1864, ii, p. 331.

This genus is extremely close to *Eudema (Epicosmus)*, the main difference according to Chaudoir being in the shape of the ligula, the paraglossae of which do not project beyond it. The prothorax is widely arcuate laterally from the neck to the deep hind incision, and pedunculate at base.

The only African species known is *Trichisia rhodesiana* Pér.; the other three species included in the genus are from India, Hong-Kong, and Eastern Australia.

Gen. Microcosmus Chaud. Descr. Cat., p. 481.

Microcosmus tenuipunctatus Laf.

Descr. Cat., p. 482.

Locality.—Port Elizabeth (Cape). Apparently restricted to the western Cape Province. The brightness of the yellow markings and the very short pubescence on the elytra are very noticeable.

Microcosmus aurantiacus Chaud. Descr. Cat., p. 483.

> Syn: laetiusculus Chaud. Descr. Cat., p. 483.

I am of opinion that M. laetiusculus cannot be separated from M. aurantiacus.

Locality.—Cape (Uitenhage); Transvaal (Pietersburg, Lydenburg); S. Rhodesia (Sawmills); Mozambique (Beira).

The size of this species is very variable; I have seen two very small examples (5 mm.) from Newcastle (Natal).

Gen. Epigraphus Chaud. Descr. Cat., p. 483.

Epigraphus amplicollis Sch. Descr. Cat., p. 484.

Locality.—Natal (Durban); Mozambique (Beira).

#### TRIBE CHLAENINI.

Gen. Chlaenius Bonelli.

Syn: Rhizotrachelus, Vertagus, Ocybatus, Dinodes, Pteroticus.

The additions to this genus are mainly from Southern Rhodesia, where other species previously described from Nyassaland, British East Africa, and Tanganyika Territory will be doubtless found to occur. In Hereroland and Ovamboland only a few species have been recorded. It is doubtful if any new or striking form will be found here, because the climatic conditions are identical with those of Bechuanaland and western South Rhodesia. Very few species are known from Angola, but the insect fauna of the southern part closely approximates to that on the left bank of the Cunene River.

I have recast the key to the species of the genus *Chlaenius*, which I divide into two sections according to the shape of the last joint of the palpi—*i.e.* either (1) securiform or broadly securiform, or (2) cylindrical. These two divisions are split into subsections according to the shape of the prothorax, which is regularly ampliate, rounded,

and not or very little more narrowed at base than at apex; regularly cordate or elongate cordate, the base being much narrower than the apex; sub-trapezoidal with the base sinuate laterally, or with the base not, or very little, sinuate laterally.

This arrangement is a very notural one, and helps to separate without much difficulty species which, in spite of similar livery, have really no affinity. Only in one case is one species (*Chlaenius dohrni*) widely separated from its congeners (*Chlaenius zanzibaricus*, etc.).

#### First Section.

Palpi with the ultimate joints securiform or triangular, usually more broadly so in the male than in the female. A3. Palpi broadly securiform or diamond-shaped. B<sup>2</sup>. Elytra with the alternate intervals sharply tectiform. C2. Prothorax one-fourth broader than long, ampliate rounded laterally. a<sup>2</sup>. Prothorax a little attenuate laterally at apex. Each elytron with a submedian quadrate yellow patch . . . . . sulcatus a1. Prothorax not attenuated laterally in front. Each elytron without a yellow patch . . . . . . immaculatus C¹. Prothorax regularly ampliate, rounded laterally. a<sup>2</sup>. Each elytron without a yellow patch a<sup>1</sup>. Each elytron with two yellow patches . . quadrimaculatus B<sup>1</sup>. Elytra without alternately raised intervals.  ${f C}^5$ . Prothorax regularly ampliate, rounded laterally. Intervals of elytra convex. a<sup>2</sup>. Each elytron with one posterior large, at times irregular yellow patch; legs and antennae black a1. Each elytron with one posterior, ovate, small yellow patch; first antennal joint and whole of legs yellow . . . . . . orphanus C4. Prothorax sub-trapezoidal. Intervals of elytra sharply costate. Elytra without yellow markings, outer margin brilliant green . cupreocinctus C<sup>3</sup>. Prothorax strongly cordiform. Elytra without a green margin . C2. Prothorax and elytra very slender. a<sup>2</sup>. Each elytron with a median, transverse yellow band; first antennal joint and base of femora reddish yellow . . . . hacquardi a<sup>1</sup>. Elytra concolorous, the three basal joints of antennae cyaneous lucidulus C1. Prothorax slender, slightly longer than, or as long as, broad. a<sup>3</sup>. Each elytron with a postical yellow patch not extending over more than four intervals.  $b^2$ . Last joint of palpi diamond-shaped. c2. Outer margin of prothorax flavescent; three basal antennal joints reddish yellow . . . . . . . . . dissidens c1. Outer margin of prothorax not flavescent; only the basal antennal joint  $b^1$ . Last joint of palpi broadly securiform. c2. Legs reddish yellow, except knees and tarsi, which are infuscate rebellis

. bohemani

	a <sup>2</sup> . Postical band extending from the second stria over the whole posterior
	part. A slender form; outer margin not flavescent, the three basal
	antennal joints reddish ditulus
	a <sup>1</sup> . Elytra without yellow patches.
	$b^2$ . The whole antennae red reichei
	$b^1$ . The whole antennae not red stenotrachelus
$A^2$ .	Palpi securiform.
$\mathbb{B}^3$ .	Each elytron with a postical yellow patch.
$C^2$ .	Patch extending from the suture to the outer margin fasciger
C1.	Patch extending on four or five intervals only.
	a <sup>3</sup> . Prothorax slender, slightly angular laterally effugiens
	a <sup>2</sup> . Prothorax slender, not angular laterally.
	b <sup>2</sup> . Yellow patch on each elytron whole.
	c². Intervals of elytra convex fenestratus
	$c^1$ . Intervals plane
	$b^1$ . Yellow patch on each elytron deeply incised posteriorly . ovambo
	$a^1$ . Prothorax a little ampliated. The three basal antennal joints reddish yellow.
	$b^2$ . Legs yellowish red
	b¹. Knees, apices of tibiae red, tarsi black; patch oblong . perspicillaris
$\mathrm{B}^2$ .	Each elytron without a postical yellow patch. Prothorax ampliate rounded,
	as broad as long. Uniformly green or greenish blue fulvipes
$B^1$ .	Each elytron with a long arcuate yellow band reaching the apex along the
	outer margin. Prothorax trapezoidal, broader at base than at apex
	conformis
$A^1$ .	Palpi broadly securiform. Prothorax sub-parallel, slightly sinuate towards
	the base. Margin of elytron yellow

#### Second Section.

Palpi with the ultimate joints cylindrical or nearly so, and truncate at tip. Male without a small tooth in the inferior basal part of the fore femora.

- A<sup>3</sup>. Prothorax regularly ampliate, rounded laterally.
- B<sup>2</sup>. Elytra with an apical sutural yellow patch.
- C2. Pronotum red.
  - a<sup>3</sup>. Pronotum with two median narrow fuscous bands.
  - b<sup>2</sup>. No anterior yellow patch on each side. Outer margin of elytra narrowly yellow. Pronotal bands not interrupted in the anterior part

vitticollis

- $b^1$ . An anterior yellow patch on each side. Outer marginal patch reaching the 5th stria; head green. The two median pronotal bands interrupted in the anterior part . . . . . . . . . . . . pulchellus
- a<sup>2</sup>. Pronotum without any fuscous band. Elytra with the marginal yellow band ascending the suture, and on each side a sub-quadrate yellow patch situated at about three-quarters of the length

fulvicollis

a1. Pronotum red, with a broad fuscous median band. Elytra with an

outer marginal yellow band, narrowed in the median part, wider
behind, and distinctly ascending the suture, and on each side a sub-
ovate yellow patch situated slightly past the median part . kirki
C <sup>1</sup> . Pronotum fuscous bronze.
a <sup>2</sup> . Elytra with a small bright yellow post-median quadrate patch on each
side and a triangular sutural apical spot verecundus
a <sup>1</sup> . Elytra with a triangular sutural apical spot and no post-median patch,
outer margin narrowly flavescent
B1. Elytra without an apical sutural yellow patch.
C <sup>5</sup> . Elytra without post-median patch or sutural spot, outer margin not flavescent.
$a^2$ . Prothorax as long as broad; head very shiny, upper side of body sub-
opaque
fusco-cyaneous infersus C <sup>4</sup> . Elytra black, outer margin of elytra somewhat coarsely shagreened and black,
body very large zanzibaricus C³. Elytra very dark blue, outer margin of elytra finely aciculate and cyaneous,
body very large coeruleolimbatus C². Elytra black, outer margin of thorax and elytra narrowly blue lugens
C <sup>1</sup> . Elytra black, outer margin of thorax and elytra concolorous morio
A <sup>2</sup> . Prothorax cordiform.
B <sup>3</sup> . Prothorax strongly cordiform, slightly broader than long.
C <sup>3</sup> . Each elytra with a discoidal patch or patches and an apical marginal one.
a <sup>3</sup> . Elytra broad, parallel, a median quadrate yellow patch and a triangu-
lar marginal one at apex $nuncius$ $a^2$ . Elytra somewhat ampliate behind, a post-median sinuate patch and
an apical marginal one quadrisignatus
an apical marginal one
signatus
C <sup>2</sup> . Elytra without marginal yellow band or yellow spots. Costae of elytra
carinate, moderately punctate laterally coeruleopennis
C <sup>1</sup> . Elytra with a yellow marginal band.
a <sup>3</sup> . Head and prothorax somewhat sparsely punctate; marginal band
extending to the edge of the 9th interval leucoristus
a <sup>2</sup> . Head and prothorax very closely and deeply punctate, a broad lateral
yellowish band extending from the margin to the 5th interval
yenowish band extending from the margin to the 5th interval cribricollis
a <sup>1</sup> . Head and prothorax deeply but moderately sparsely punctate.
b <sup>3</sup> . Lateral band extending from the margin to the 6th interval limbipennis
$b^2$ . Lateral band extending to the 4th interval marginipennis $b^1$ . Lateral band invading the apical part for a sixth of the length
B <sup>2</sup> . Prothorax cordiform, as broad as long.
a <sup>5</sup> . Elytra with a broad lateral band extending to the 5th interval;
prothorax without a vollow bonder
prothorax without a yellow border limbatus a <sup>4</sup> . Prothorax with a narrow yellow border. Elytra with a narrow lateral
marginal band ascending the intervals in the apical part. simulatus
a <sup>3</sup> . Yellow lateral band extending as far as the 6th interval and emitting
a. Tonon lateral band extending as far as the our interval and emitting

a short median spur; an elongate spot on the supra-apical part	of
the 4th interval	us
a <sup>2</sup> . Lateral band extending to the 5th stria in the anterior part, impingi	
there on the 3rd, reduced thence to the margin; a supra-apical pat	
on the 3rd to 4th intervals notabi	lis
a <sup>1</sup> . Lateral band extending to the 6th stria in the anterior part, dilat	
there in the middle to the 4th interval, narrowed thence to the 8	
interval and the margin; an ovate yellow supra-apical patch on t	
3rd to 5th intervals	us
a <sup>2</sup> . Elytra without a yellow outer margin. Head and thorax copper	
elytra dark blue-black	
$a^1$ . Elytra with a yellow outer margin.	
b <sup>3</sup> . Elytra glabrous, the yellow marginal band extending on the ne	xt
interval.	
$c^2$ . Intervals costate angustate	us
$c^1$ . Intervals plane solivag	
b <sup>2</sup> . Elytra glabrous, intervals impunctate, the yellow band extending	
the next interval, and expanding on the apical part for a she distance	
b <sup>1</sup> . Elytra briefly pubescent, intervals closely punctate, the yellow bar	nd ad
extending on the next interval, and not expanding on the apical pa	rt
consobrin	
A¹. Prothorax broad, sub-trapezoidal or trapezoidal.	
B <sup>3</sup> . Prothorax slightly sinuate laterally above the base; the outer angle in a li	$\mathbf{n}\mathbf{e}$
with the 6th elytral costa.	
C2. Elytra with no yellow outer margin. Elytra with a posterior yellow pat	
on each elytron. Head and prothorax bright green, the latter ve broad. Elytra bright violaceous blue	-
C <sup>1</sup> . Elytra with no yellow patch nor a yellow outer margin. Head and prothor	
bright coppery red.	~
a². Antennae and legs reddish yellow.	
$b^4$ . Elytra with the costae carinate last	
$b^3$ . Elytra with the costae very highly carinate hypocrit	
b <sup>2</sup> . Elytra black	
b <sup>1</sup> . Elytra bright cyaneous, outer margin blue cyanipen	
<ul> <li>a<sup>1</sup>. Antennae and legs red, elytra black, prothorax impunctate levicol</li> <li>B<sup>2</sup>. Pronotum very little sinuate laterally above the base.</li> </ul>	us
C <sup>3</sup> . Pronotum smooth on the disk, costae of elytra impunctate.	
$a^2$ . Elytra with a yellow posterior patch on each side.	
b2. Elytra with an ovate quadrate yellow patch on each side bipustulat	us
$b^{1}$ . Elytra with a long quadrate yellow patch reaching the apex.	
c <sup>2</sup> . Pronotum closely punctate controvers	
c <sup>2</sup> . Pronotum closely punctate	us
$a^1$ . Elytra without a yellow patch. $b^3$ . Head and pronotum, and elytra bright green, costae sharp . $simple$	or
b <sup>2</sup> . Head and pronotum bright green, elytra olive green, costae tectiform	
robust	us

b <sup>1</sup> . Head and pronotum bright green, elytra violaceous, costae very little raised
C <sup>2</sup> . Pronotum and costae closely punctate, dark metallic green above, outer
margin of elytra blue, an apical marginal yellow border mashunus
C <sup>1</sup> . Prothorax and elytra with a yellow outer margin.
$a^2$ . Elytra with an interior and posterior discoidal yellow patch on each side
dussaulti
a <sup>1</sup> . Elytra without yellow patches.
b <sup>5</sup> . Prothorax vaguely punctate, elytra nearly glabrous, intervals smooth
capicola
b4. Prothorax very closely punctate over the whole disk, elytra very briefly
pubescent, intervals aciculate punctate superstes
b <sup>3</sup> . Prothorax not closely punctate in the anterior part, densely pubescent,
intervals finely aciculate marginicollis
$b^2$ . Prothorax very closely punctate, alternate costae sharply carinate, with
the ridge smooth, the others closely aciculate punctate . costipennis
$b^1$ . Elytra pubescent, with a broad yellow outer margin extending to the
6th costa. Size large senegalensis
B <sup>1</sup> . Pronotum trapezoidal, outer angle in a line with the 7th costa.
C <sup>2</sup> . Body black, elytra costate, glabrous.
a <sup>4</sup> . Pronotum impunctate.
$b^2$ . The 3 basal joints of antenna fuscous black, legs black cham
$b^1$ . Whole antenna and the legs red natalensis
a <sup>3</sup> . Pronotum punctate
a <sup>2</sup> . Pronotum aciculate, elytra pubescent.
$b^2$ . Costae little raised and closely account
b¹. Costae raised and closely punctate piceus
a <sup>1</sup> . Pronotum variolose punctate, antennae black dohrni
C¹. Body metallic bluish green. Pronotum closely aciculate, the 2 basal joints
of antenna red, the rest fuscous or black

## Chlaenius sulcatus Fab.

Descr. Cat., p. 494.

Locality.—Cape (Port Elizabeth); Mozambique (Beira).

Chlaenius quadrimaculatus Boh.

Descr. Cat., p. 494, pl. x, fig. 2.

Locality.—North Rhodesia (Broken Hill); Mozambique (Manica).

 $Chlaenius\ myops\ Gor.$ 

Descr. Cat., p. 495.

In this species, which seems to have a very wide distribution (Senegambia, Abyssinia, Ovampoland, and Natal), the normal shape of the posterior yellow patch is obliquely ovate, reaching from the 3rd to the 8th interval. In the var. erikssoni this patch is reduced to a small streak on the 4th interval, and a longer one on the 6th, briefly connected by a very small one, often indistinct on the 5th. This form, which I named C. erikssoni, occurs in Ovampoland and in Natal. In two typical examples from Transvaal—Barberton and White River—the posterior patch is broadly ovate, and reaches from the 3rd to the 8th interval.

Locality.—Cape (Basutoland); Transvaal (Lydenburg, Pretoria, Waterkloof, Johannesburg); Natal (Umvoti).

Chlaenius cupreocinctus Reich.

Voy. Gal. Abyss. Ent., p. 266, pl. xvi, f. 5.

Syn: tigreanus Roth., Wiegm. Arch., 1851, i, p. 116.

Head and prothorax bright coppery, with greenish sheen especially on the sides, elytra sub-metallic black, outer margin bright green; antennae black with the 3 basal joints red; palpi and legs red, apical joints of the former broadly securiform; head very closely aciculate; prothorax sub-trapeziform, a little ampliate laterally in the middle, and only a little attenuate thence to the outer angle, less so in the male than in the female, but not sinuate there, the base broader than apex, closely, deeply, and regularly punctate all over; elytra oblong, the intervals sharply carinate except the juxtasutural one, and each with a distinct row of punctures on each side of the carination; the bright green lateral band invades the base of the 8th stria, but is restricted thence to the margin interval.

Length,  $13\frac{1}{2}$ -17 mm.; width, 5-8 mm.

Locality.—South Rhodesia (Umtali). Originally recorded from Abyssinia.

Chlaenius caffer Boh.

Descr. Cat., p. 514.

This handsome species is now recorded from Salisbury, in Southern Rhodesia.

Chlaenius hacquardi Chaud. Coleopt. Novit., 1883, p. 30.

Very dark metallic blue; antennae very long, fuscous black with the first joint red; legs black with the base of the femora flavescent; head deeply and very closely pitted; prothorax very slender, ampliate rounded laterally, narrower towards the base than towards the apex, a little longer than at the greater median width; the basal angle in a line with the 4th costa of the elytra, the latter also slender, and very briefly pubescent, very slightly ampliated from the median part, sharply costate, the costae deeply and closely punctate, at about the median part a transverse pale yellow band extending from the 3rd to the 7th interval; underside cyaneous blue; tarsi, especially the intermediate and posterior ones, very long; interior femora with a minute tooth or spine at the base underneath.

Length, 10 mm.; width,  $3\frac{1}{4}$  mm.

This very slender species is retained by Chaudoir in the group *Vertagus*, but beyond the general facies there is hardly any distinctive character differentiating it from other slender forms of the genus. It is very closely allied to *C. buqueti* Dej. from Senegambia, and was first discovered at Mhonda (? German East Africa).

Locality.—South Rhodesia (Umtali).

## Chlaenius rebellis sp. n.

Head and prothorax cyaneous, moderately shiny, elytra very dark blue, with a quadrate yellow post-median patch extending on intervals 3-6; underside bright blue; antennae black with the basal joint red; palpi rufescent, broadly securiform at tip; legs rufo-flavous with the knees, the anterior tibiae, and the apical part of the others fuscous black. Of slender shape (Orybatus); head not aciculate in the centre, and aciculate on the sides and neck; prothorax a little longer than broad, regularly ampliate rounded laterally, and in a line with the 5th stria of the elytra, broad at base as at apex, with the hind angles not prominent, closely and deeply, somewhat rugosely, punctate; elytra very briefly pubescent, oblong, finely striate punctate, with the intervals plane  $(\mathfrak{P})$ ; half-way between middle and apex is a transverse quadrate yellow patch extending on the 3rd to the 6th interval, thorax and pectus deeply punctate; abdomen smooth in the median part.

Length,  $12\frac{1}{2}$  mm.; width, 5 mm.

The colour of the legs is like that of *C. perspicillaris*, but the latter differs considerably in the shape of the thorax, and of the much less broadly securiform palps.

Locality.—Natal (Durban); Transvaal (Waterberg); Mozambique (Rikatla).

## Chlaenius dissidens sp. n.

Bluish green, moderately shiny, very briefly greyish pubescent above; palpi, the three basal joints of the antennae, and the legs red yellowish; prothorax narrowly but distinctly edged with yellow; elytra each with a yellow patch in the posterior part. Head smooth, vaguely plicate laterally behind; the last joint of the palpi, instead of being securiform and truncate at apex, are broadly dilated but diamond-shaped; prothorax narrow, only slightly ampliate laterally, as broad at the base as at the apex, the basal angle not pronounced but in a line with the 4th interval of the elytra, deeply, closely, and somewhat rugosely punctate; elytra oblong, parallel, finely punctate striate, intervals plane, very closely punctate, the yellow patch equidistant from the centre and apex is sub-quadrate, slightly sloping and extending on the 3rd to the 6th interval but sometimes extending partly on the 7th, then the patch is no longer sub-quadrate; underside deeply punctate, abdomen smooth except on the sides, which are less deeply punctate than the pectus.

Distinguished by the shape of the palpi and also by the yellow border of the prothorax, which is slightly less ampliate laterally in the male than in the other species of the group; the elytra are parallel laterally.

Length, 12 mm.; width, 4 mm. Locality.—Southern Rhodesia (Umtali).

## Chlaenius marleyi sp. n.

Bluish green on the head and thorax, darker blue on the elytra, very briefly pubescent above; only the first basal joint of the antennae red; palpi somewhat infuscate, legs reddish yellow; elytra each with a yellow patch in the posterior part. Head as in the preceding species, palpi of the same shape; prothorax longer than broad, ampliate laterally in the middle but distinctly narrower past the median part than in the anterior, and even slightly sinuate towards the base, which is slightly wider than the apex, with the basal angle made more prominent by the lateral sinuation and in a line with the 4th stria of the elytra, very closely, deeply, and somewhat rugosely punctate, the outer margin concolorous; elytra oblong but slightly ampliated past the middle, finely striate punctate, with the intervals distinctly convex (3) and very closely punctate, the yellow patch is ovate, and extends on the 3rd to the 6th interval; underside as in previous species.

This species, which, like C. dissidens, is easily recognised by the

diamond-shaped ultimate joint of the palpi, differs also from the above named by the shape of the prothorax, which, instead of being almost sub-cylindrical, is, if not strongly sinuate, at least narrower in the posterior than in the anterior part. The elytra are also less parallel.

Length, 10 mm.; width,  $3\frac{3}{4}$  mm. Locality.—Natal (Durban, H. W. Bell-Marley).

Chlaenius bohemani Chaud.

Descr. Cat., p. 496.

Locality.—Transvaal (Rustenburg, Lydenburg); Southern Rhodesia (Umtali).

Chlaenius fasciger Chaud.

Descr. Cat., p. 496, pl. x, f. 3.

Locality.—Free State (Bothaville); S. Rhodesia (Salisbury).

Chlaenius fenestratus Chaud.

Descr. Cat., p. 496.

In my Descriptive Catalogue I described this species as a variety of *C. bohemani* Chaud., but now that I have examined more material of both sexes, I find that Chaudoir was right in considering it as a species different from the latter.

The prothorax is broader, the last joint of the palpi are not as broadly securiform in either sex; the yellow patch on the elytra is much less ovate and extends from the 3rd to the 8th interval, and is longer on the 5th than on the others. The three basal joints of antennae are red instead of the basal one only, as in *C. bohemani*.

Length,  $12-12\frac{1}{2}$  mm.; width,  $4-4\frac{3}{4}$  mm.

Locality.—Natal (Kranzkop, Malvern); Transvaal (Lydenburg); S. Rhodesia (Salisbury); Mozambique (Lourenço Marquez, Beira).

Chlaenius cribellatus Chaud.

Descr. Cat., p. 497.

Very closely allied to the preceding species; the shape of the prothorax is nearly the same but slightly broader, so that it is as long as broad; the colour of the elytra is black and opaque instead of metallic green or blue, and they are a little broader, the yellow patch is the same, the very closely acciulate the intervals are plane (3) instead

of being somewhat convex; and only the first two joints of the antennae are reddish instead of the three.

Length, 12 mm.; width, 5 mm.

Originally described from Lake N'Gami. I consider as being this species a 3 from the Transvaal (Shilouvane).

Chlaenius ovambo Pér.

Descr. Cat., p. 499.

Locality.—Southern Rhodesia (Salisbury, Plumtree).

Chlaenius perspicillaris Erichs.

Descr. Cat., p. 497.

Locality.—Cape (Mossel Bay, Uitenhage, Douglas, Prieska, Hopetown, Kimberley, Griquatown, Bechuanaland); Transvaal (Platrivier in Waterberg, Grimm's Mine in Lydenburg); S. Rhodesia (Bulawayo, Salisbury); Damaraland (Tsumeb, Grootfontein); also Angola and Somaliland.

Chlaenius conformis Dej.

Suppl. Descr. Cat., 1898, p. 353, pl. xi, f. 7.

Locality.—Natal (Durban); Senna in Mozambique.

Chlaenius capensis Gory.

Descr. Cat., p. 514.

Locality.—Cape (Port Elizabeth, Uitenhage, Graham's Town, Willowmore); Natal (Durban); Transvaal (Pretoria, Lydenburg); Bechuanaland (Enkoken); Mozambique (Beira and Rikatla).

Chlaenius vitticollis Boh.

Descr. Cat., p. 499.

Locality.—Orange Free State (Smithfield); Transvaal (Pretoria, Lydenburg); S. Rhodesia (Salisbury).

Chlaenius pulchellus Boh.

Descr. Cat., p. 500.

C. fraternus merges so often in C. pulchellus that it must be considered as only a variety.

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Locality.—Natal (Durban); S. Rhodesia (Salisbury, Arcturus); Bindura, Plumtree, Matoppos; Transvaal (Strydpoort, Pietersburg, Lydenburg, Pretoria); N. Rhodesia (Pemba).

Chlaenius fulvicollis Chaud.

Descr. Cat., p. 498.

Syn: C. mimus Pér.

Descr. Cat., p. 499.

C. mimus is only a variety of C. fulvicollis, in which the yellow markings of the elytra are not very apparent.

Locality.—Cape (Uitenhage, Graham's Town); Transvaal (Pretoria, Roodeplaats); S. Rhodesia (Umtali, Ungusan on Kokwe River); Mozambique (Beira).

Chlaenius verecundus Pér.

Descr. Cat., p. 501, pl. x, f. 5.

Locality.—Transvaal (Pretoria, Woodbush Villa in Zontpansberg); S. Rhodesia (Salisbury, Umtali).

In this species the yellow markings are very variable. Thus in an example from S. Rhodesia (Salisbury) ( $\mathcal{P}$ ), and in another from Durban ( $\mathcal{F}$ ), a somewhat larger specimen, the discoidal patches are altogether absent. In an example ( $\mathcal{P}$ ) from Delagoa (Rikatla) this patch, and also the apical one, are so faint as to escape detection, while in another example ( $\mathcal{F}$ ) from the same locality there are no traces whatever of yellow markings. It is this variety which I considered at first to be identical with C. nitidiceps Dej., which is smaller, less ampliated behind in the  $\mathcal{F}$ , and has not been recorded hitherto but from the western part of the Cape of Good Hope.

Chlaenius enonensis Pér.

Suppl. Descr. Cat., p. 353.

Locality.—S. Rhodesia (Salisbury).

Chlaenius infersus sp. n.

Head and prothorax very dark green, labrum, antennae, and legs rufescent, last joint of palpi only slightly dilated at apex, more cylindrical there than the other species of the group; head accountable but impunctate in the centre; prothorax gradually ampliate laterally but only very slightly sinuate towards the base, where it is also only very slightly wider than at the apex, the posterior angle in a line with the 5th stria of elytra, length nearly equal to the width, closely and deeply punctured and clothed like the elytra with a dense, flavous pubescence; elytra parallel (3), narrowly striate, the intervals plane but slightly convex in the anterior part, and very closely and somewhat roughly punctate; anterior tibiae (3) with a very small basal tooth underneath, underside with the normal sculpture.

Length, 12 mm.; width,  $4\frac{1}{2}$  mm.

While the shape of the palpi approximate more to that of the second group of the genus, the general facies and that of the prothorax is more that of the *C. communimacula* and *nitidiceps* group.

Locality.—Cape Colony (Hanover).

Chlaenius zanzibaricus Chaud. Descr. Cat., p. 491, pl. x, fig. 1.

Locality.—Mozambique (Beira).

posed the name of C. mamboianus.

Chlaenius lugens Chaud. Descr. Cat., p. 492.

Locality.—Zanzibar, Madagascar, Angola.

Chlaenius quadrisignatus Boh. Descr. Cat., p. 501.

Locality.—S. Rhodesia (Plumtree, Salisbury, Umtali); Mozam-

bique (Beira).

Some examples from the above localities are of larger size than the type. It is probably to similar ones from Mamboia that Bates pro-

Chlaenius signatus Boh.

Descr. Cat., p. 502.

Locality.—Transvaal (Pietersburg, Leydsdorp); S. Rhodesia (Umtali, Plumtree, Umvuma).

Chlaenius modestus Boh.

Descr. Cat., p. 508.

Locality.—Cape (Kimberley); Free State (Hoopstad); Natal (Kranz Kloof).

Chlaenius cribricollis Dej.

Descr. Cat., p. 505.

Locality.—Cape (Beaufort West, Willowmore, Uitenhage); S. Rhodesia (Sebakwe, Salisbury, Umtali); Mozambique (Beira).

Chlaenius simulatus Boh.

Descr. Cat., p. 506.

Locality.—Cape (Uitenhage).

Chlaenius coscinioderus Chaud.

Descr. Cat., p. 504.

Locality.—Cape (Port Elizabeth).

Chlaenius notabilis Lafert.

Descr. Cat., p. 503.

Locality.—Free State (Bothaville).

Chlaenius commistus Pér.

Descr. Cat., p. 503.

Locality.—Free State (Bothaville); Transvaal (Pretoria, Waterberg); S. Rhodesia (Khami); Mozambique (Lourenço Marquez).

Chlaenius tenuicollis Fabr.

Descr. Cat., p. 508.

Locality.—Cape (Port Elizabeth, Graham's Town, Uitenhage).

Chlaenius angustatus Dej.

Descr. Cat., p. 509.

Locality.—S. Rhodesia (Matoppos); Mozambique (Beira). Recorded also from Zanzibar and Pemba Island.

Chlaenius solivagus sp. n.

An extremely close ally to *C. angustatus* Dej. The colour is the same, the narrow elongated thorax also, but the intervals of the elytra are altogether plane even at the base (3); the lateral yellow margin is a little broader and the apical one distinctly so.

Length, 10-11 mm.; width,  $4\frac{1}{9}$  mm.

Locality.—S. Rhodesia (Kokwe River, Umtali); Mozambique (Beira).

Chlaenius cylindricollis Dej.

Descr. Cat., p. 509.

Locality.—Cape (Zululand, M'fongosi); Transvaal (Pretoria, Lydenburg, Johannesburg, Great Letaba); Bechuanaland (Enkoken); S. Rhodesia (Salisbury, Kokwe River); Mozambique (Beira).

Recorded from Pemba Island (Zanzibar).

Chlaenius laetus Fabr.

Descr. Cat., p. 511.

Locality.—Cape (Prieska, Port Elizabeth, Uitenhage, Graham's Town).

Chlaenius comes Pér.

Descr. Cat., p. 512.

Locality.—S. Rhodesia (Salisbury).

# Chlaenius levicollis sp. n.

Head and prothorax red, shining, elytra black with a faint cyaneous tinge, and the outer marginal interval dark green; antennae, palpi, and legs red; head non-aciculate, prothorax ampliate rounded laterally, slightly narrowed towards the base, but broad, not sinuate, and as broad as long, with the basal angles in a line with the 6th stria, disk without any puncture; elytra elongate, oblong, narrowly punctate striate, the intervals highly costate.

In general appearance and livery it much resembles C. comes, but the antennae and legs are red instead of fuscous black, the supra marginal interval is greenish instead of dull black, and the prothorax is quite impunctate.

Length, 16 mm.; width, 6 mm. Locality.—S. Rhodesia (Salisbury).

Chlaenius cyanipennis Boh.

Descr. Cat., p. 512.

Locality.—Cape (Uitenhage).

Chlaenius bipustulatus Boh.

Descr. Cat., p. 498.

Locality.—Cape (Bedford); Transvaal (Johannesburg, Pretoria, Lydenburg); Free State (Smithfield, Bothaville); S. Rhodesia (Sebakwe, Victoria, Salisbury); Mozambique (Inhambane); N.-E. Damaraland.

It is recorded also from Abyssinia and Zanzibar.

## Chlaenius controversus sp. n.

In shape, size, and colour it is like C. bipustulatus Boh., but it differs in the following characters: the punctures on the prothorax are deeper, and equally spread on the disk, while in C. bipustulatus the median part is almost impunctate from the interior part to the fore point of the discoidal sulci; the intervals on the elytra are quite plane from about a fifth of the length to the apex (P), whereas in bipustulatus (P) they are raised, slightly convex, and more distinctly shagreened than in C. controversus, the posterior yellow patch instead of being sub-quadrate extends from the 3rd stria to the 8th, and is continued there and merges into an apical marginal moderately broad band, thus forming a conspicuous crescent-shaped band somewhat similar to that of C. conformis, which is, however, plainly distinct from C. controversus.

Length, 14 mm.; width, 6 mm.

Locality.—S. Rhodesia (Macloutsi River); Mozambique (Beira).

In general appearance and livery this species may have been mistaken for *C. conformis*, ranging from Senegal to Natal.

Chlaenius simplex Wied.

Descr. Cat., p. 507.

Locality.—Natal (Howick).

Chlaenius robustus Boh.

Descr. Cat., p. 512.

Locality.—S. Rhodesia (Umtali).

Chlaenius validicornis Boh.

Descr. Cat., p. 516.

Locality.—S. Rhodesia (Plumtree, Salisbury, Insiza).

Chlaenius mashunus Pér.

Descr. Cat., p. 516.

Syn: C. pronus Pér., Ann. S. Afr. Mus., vol. iii, 1904, p. 185.

Dark bronze-green with the elytra darker, briefly pubescent, both the prothorax and elytra with a blue marginal sheen, the latter with an apical narrow yellow margin; palpi, antennae, and legs flavescent; head strongly and closely punctate; prothorax nearly sub-parallel, broader at base than at apex, with the basal angle in line with the 7th stria of the elytra, very deeply and very closely punctate; elytra very little broader than the base of the prothorax, oblong, narrowly punctate, striate with the intervals only moderately plane and covered with deep, contiguous moderately fine punctures.

The shape of the prothorax approximates that of the *natalensis* piceus group, but the elytra are more oblong.

Length,  $10-10\frac{1}{2}$  mm.; width,  $5-5\frac{1}{4}$  mm. Locality.—S. Rhodesia (Salisbury, Umtali).

> Chlaenius dussaulti Duf. Descr. Cat., p. 515.

Locality.—Transvaal (Pienaar's River, Fountaingrove, Wonderboom in Pretoria, Marico, Zoutpansberg); S. Rhodesia (Insiza, Enkeldoorn, Salisbury).

Chlaenius capicola Chaud. Descr. Cat., p. 512.

Syn: C. mendax Chaud.

Descr. Cat., p. 513.

Syn: C. lacustris, Chaud. Descr. Cat., p. 513.

The examples from the north-eastern parts of the South African area are more brilliant green than those occurring in the south-western, and also occasionally larger (mendax). C. lacustris, of which I have a co-type given me by the Genoa Museum, cannot be separated from C. capicola; the straightness of the pronotum of C. lacustris varies in examples from the same locality.

Locality.—Cape (Uitenhage, Bedford); Natal (Durban); Zululand (M'fongosi); S. Rhodesia (Saw Mills, Queque, Kokwe River, Salisbury, Umtali); Mozambique (Rikatla, Beira).

## Chlaenius superstes sp. n.

Allied to *C. marginipennis*, but larger and with the whole disk of the prothorax deeply and very closely punctured.

Olive metallic green with the head and prothorax brighter green above, underside cyaneous, legs, palpi, antennae, and labrum yellow, a yellow band extending in the outer margin and the last interval, and from the shoulder to about a third of the length covering also the 8th; in the posterior part the apices of the 6th, 7th, and 8th intervals are yellow; upper side very briefly pubescent; head and prothorax as in C. senegalensis, but both are very closely punctured all over, and the edge of the outer margin is flavescent; the oblong elytra are finely punctate striate, with the intervals slightly convex in the male, planer in the female, and very closely aciculate punctate.

Length,  $14\frac{1}{2}$ -15 mm.; width, 6-7 mm. Locality.—S. Rhodesia (Sebakwe, Salisbury).

Chlaenius costipennis Boh.

Descr. Cat., p. 515.

Locality.—Transvaal (Lydenburg).

Chlaenius senegalensis Dej. Descr. Cat., p. 513.

Locality.—S. Rhodesia (Insiza, Bulawayo, Plumtree).

Chlaenius cham Chaud. Descr. Cat., p. 518, pl. x, f. 4.

I have seen an example from Natal the upper part of which is wholly bright bronze.

Locality.—Natal (Harding); Mozambique (Beira).

Chlaenius aculeatus Pér.

Descr. Cat., p. 518.

This species may prove to be a diminutive example of *C. natalensis*. Locality.—Cape (Uitenhage).

Chlaenius dichrous Wied.

Descr. Cat., p. 517.

Locality.—Cape (Port Elizabeth).

Chlaenius piceus Chaud.

Descr. Cat., p. 517.

Locality.—Cape (Graham's Town, Uitenhage).

Chlaenius dohrni Bert.

Descr. Cat., p. 493.

Recorded also from the island of Zanzibar, Dar-es-Salaam, White Nile, and Nubia.

Gen. Ectenognathus Murr.

Descr. Cat., p. 521.

Ectenognathus dispar Pér.

Descr. Cat., p. 521.

Locality.—Zambesi River.

Gen. Umtalius gen. n.

I propose this genus for a singular form of Chlaeniid, which I described as a *Chlaenius* (*C. epigraphidus*), not only on account of its singular livery, which greatly resembles that of the species of the Panagaeid genus *Epigraphus*, but also because of the shape of the labial palpi, which are very broadly bell-shaped, and not obliquely truncate, while the maxillary are cylindrical. Although the two examples I examined are females, it will probably be found that the three basal joints of the tarsi are not dilated in the male.

Umtalius epigraphidus Pér.

Suppl. Descr. Cat., p. 355, pl. xi, f. 9.

Gen. Parachlaenius Kobb. Suppl. Descr. Cat., p. 356.

Parachlaenius pretorianus n. sp.

Chestnut brown, with the tarsi somewhat darker; head finely aciculate, and plicate longitudinally above the eyes, but the central frontal part is smooth; prothorax as broad as long, slightly arcuate outwardly from the projecting apex to about the middle, and inwardly thence to the sharp basal angle; it bears a few very scattered punctures, the outer margin is sharply reflexed, the basal impressions of the disk are very plane, and the median longitudinal sulcus plane, elytra paralleled with the humeral angles rounded, hardly convex except in the posterior part, finely striate punctate with the intervals plane, very closely aciculate, and densely pubescent, the pubescence erect; underside closely punctate and pubescent; legs also pubescent.

This species differs from P. singularis, which is a much larger species, by the finer and more closely set punctures in the intervals of the elytra, as well as by the coloration.

Length, 14 mm.; width, 5 mm. Locality.—Transvaal (Pretoria).

Gen. Rhopalomelus Chaud.

Descr. Cat., p. 569.

Suppl. Descr. Cat., p. 356.

Rhopalomelus angusticollis Boh. Descr. Cat., p. 569, pl. x, fig. 6.

Locality.—Transvaal (Louis Trichardt); S. Rhodesia (Bulawayo).

Gen. Callistomimus Chaud. Descr. Cat., p. 522.

## Key to the Species.

- A<sup>2</sup>. Head dark blue or metallic green.
- B<sup>2</sup>. The transverse yellow patches on the elytra not connected with the outer margin.
- C<sup>2</sup>. Elytra with an anterior and posterior patch on each side; basal joints of antennae black . . . . . . . . . . . quadripustulatus

placeus

C1. Elytra with an anterior and posterior patch, and a median and apical juxtasutural spots on each side; the two basal joints of antennae flavescent amoenusB1. Anterior lateral band on the elytra connected with the outer margin; the three basal joints of autennae flavescent. C4. Base of prothorax deeply incised below the posterior angle; elytra with a rounded sutural patch at the apex, besides the two lateral ones C3. Anterior lateral patch connected along the margin with the humeral angle, posterior one small, an apical sutural patch . . . C<sup>2</sup>. Anterior lateral patch much more sinuate than the posterior one, and both connected with the suture; each elytron has besides a post-median juxta-sutural dot and a small apical sutural patch . . . C1. Outer margin of the elytra narrowly flavescent, anterior lateral margin hardly sinuate, juxta-sutural dot wanting, or nearly so, postical patch hardly noticeable A<sup>1</sup>. Head and prothorax red. B<sup>3</sup>. Elytra with nine small yellowish dots on each side . . . B<sup>2</sup>. Elytra with one juxta-sutural post-median spot, a lateral sinuate band reaching from near the suture to the outer margin, and two dots on the posterior part of the 3rd interval . . . . guttatus B1. Elytra with greenish longitudinal markings along the first seven intervals,

### Callistomimus amoenus Pér.

and a transverse, somewhat zigzagged post-median somewhat evanescent

Descr. Cat., p. 524.

Locality.—Cape (Uitenhage); Free State (Bothaville).

Callistomimus sexpustulatus Boh.

Descr. Cat., p. 524.

Locality.—S. Rhodesia (Salisbury).

band

Callistomimus elegans Boh.

Descr. Cat., p. 525.

Locality.—Free State (Vredeford Road); S. Rhodesia (Salisbury).

Callistomimus caffer Boh.

Descr. Cat., p. 525.

Locality.—S. Rhodesia (Plumtree).

Group Ooidini.
Descr. Cat., p. 527.

## Key to the Genera.

- A<sup>2</sup>. Head with one seta over the eye. Penultimate joint of labial palpi glabrous.
- B<sup>2</sup>. Labrum with three setae in the anterior margin . . . Systolocranius
- B1. Labrum with six setae in the anterior margin . . . . Oodes

Gen. Systologranius Chaud. Descr. Cat., p. 527.

Systolocranius ampliolatus sp. n.

Black, shiny above on the underside; the palpi and antennae piceous, joints 4-11 fulvo pubescent; head and prothorax impunctate and similar in shape to that of S. validus; the elytra instead of being parallel as in the above-mentioned species are gradually ampliated laterally from near the base to the third part of the length, where they are one-fifth wider than at the base; they are finely punctate striate, with the 1st to the 3rd intervals nearly plane, and the others gradually tectiform, especially in the posterior part; there is only one distinct puncture on the 3rd interval half-way between the middle and apex, and not in a line with the puncture on the opposite side; underside sub-iridescent.

Closely allied to S. goryi Laf. from Senegambia, and recorded also from Uganda, Guinea, and erroneously from the Cape. The lateral attenuation of the prothorax begins from the median part, and is therefore more noticeable than in S. goryi; the lateral post-humeral sinuation of the elytra is very distinct, whereas in S. goryi there is none, and in the latter the striae are more distinctly punctate and the intervals more convex or more sharply costate, even in the female. Moreover, there are two punctures on the 3rd interval in S. goryi, and only a posterior one in S. ampliolatus. In general appearance this species greatly resembles Chlaenius cham, but can be at once distinguished by the absence of the puncture on the outer angle of the base of the prothorax.

Length, 20-22 mm.; width, 8 mm.

Locality.—S. Rhodesia (Umtali); Mozambique (Beira).

## Systolocranius validus Klug.

Descr. Cat., p. 528.

Locality.—Cape (Transkei); Natal (Kranzkop, Durban); East Africa (Luippoldkette, Tabora).

#### Gen. Oodes Bon.

### Descr. Cat., p. 529.

	· ±
$A^2$ .	Prosternum produced in a short aculeate process.
B2.	Prothorax with a distinct supra-basal impression on each side.
$C^2$ .	Upper side black. Two punctures on 3rd interval.
	a <sup>2</sup> . Body ampliate behind conspicuus
	a <sup>1</sup> . Body elongate, elytra sub-parallel.
	$b^2$ . Body and legs black, size large senegalensis
	$b^1$ . Margin of prothorax and legs piceous red, size smaller . natalensis
C1.	Upper side bronze green similatus
$\mathbb{B}^1$ .	Prothorax with no distinct supra-basal impression.
$C^2$ .	Body large, no puncture on 3rd interval lenis
C1.	Body small, two punctures on 3rd interval palpalis, nanus
A1.	Prosternum produced in a long spine. No distinct supra-basal impression.
$\mathbb{B}^3$ .	Striae of elytra distinct, 6th stria not curving inwards near the base
	levicollis
$B^2$ .	Striae of elytra very fine, 6th stria curving plainly inwards near the base

angolensis

B¹. Striae of elytra evanescent or obliterated, except the juxta-sutural

substriatus

Oodes conspicuus Pér.

Descr. Cat., p. 530.

Locality.—Natal (Durban); Transvaal (Nylström, Barberton, Zoutpansberg).

Oodes senegalensis Dej.

Spec. V., p. 672.

Differs mainly from O. natalensis by its much broader size, it being twice the width of the other; the prothorax is therefore proportionally less attenuate in the anterior part, and more distinctly wider at apex than the base, and the basal impressions are not so clearly line-like; the elytra have the same shape, and, being wider, the punctation of the striae is more conspicuous, and the six striae on each side are equally complete; the underside and legs are denser black in all my examples (33), and the former less iridescent than in O. natalensis.

Length, 10-12 mm.; width,  $5\frac{1}{2}-6 \text{ mm.}$ 

Locality.—Natal (Malvern, Durban); S. Rhodesia (Salisbury, Umtali).

Oodes similatus Boh.

Descr. Cat., p. 531.

Locality.—Transvaal (Parys); S. Rhodesia (Bulawayo, Salisbury).

Oodes substriatus.

Descr. Cat., p. 533.

Locality.—Transvaal (Shilouvane); S. Rhodesia (Salisbury).

Gen. MELANODES, Chaud.

Descr. Cat., p. 553.

The insects included in this genus have a superficial resemblance to that of some species of Abacetus of the tribe Feroniuni, and likewise they have two supra-orbital setae, thus differing from the Chlaenini and Oodini, but they are, however, separated by several distinct characters, such as the position of the 2nd antennal joint, which is set in the axis of the basal joint instead of the outer part, the shape of the joints of the anterior tarsi of the male, etc.

The South African species are very closely allied to each other, and only distinguishable by comparison.

## Key to the Species.

A <sup>2</sup> . Pronotum with the posterior angles acute	in termedius
B <sup>2</sup> . Lateral sinuation from middle to base slight	. ebeninus
B¹. Lateral sinuation from middle to base pronounced.	
C <sup>2</sup> . Basal angle of pronotum in a line with the 6th stria of elytr	ra rectangulus
C¹. Basal angle of pronotum in a line with the 7th stria .	. proximus
A <sup>1</sup> . Pronotum with the hind angles blunt and rounded	. aberrans

### Melanodes ebeninus Erichs.

Descr. Cat., p. 534.

Syn: M. incertus Pér., Ann. S. Afr. Mus., vol. v, 1908, p. 289.

The difference between M. incertus, described from one example, and M. ebeninus does not seem to me now to be such as to consider the two as distinct species.

Locality.—Natal (Durban).

Melanodes rectangulus Chaud.

Descr. Cat., p. 534.

Syn: M. pugnator Pér., Descr. Cat. Suppl., p. 358.

Locality.—Natal (Howick, Durban); S. Rhodesia (Umtali).

## Melanodes proximus sp. n.

Shiny black with a slight iridescence, antennae and legs dark piceous; easily recognised from the other South African species by the size of the pronotum, which is broader than long, distinctly attenuate, rounded in the first anterior part, but is very much less so from below the centre to the sharp basal angle; the lateral fold above the sulcus is slightly broader behind than in the other species, somewhat in the manner of some species of Abacetus; the elytra are wider in proportion to the width of the pronotum, and have the usual structure of the other species of the genus. Underside iridescent; pectus closely and somewhat deeply punctate. One female.

Length, 12 mm.; width, 5 mm. Locality.—S. Rhodesia (Umtali).

#### TRIBE DITOMINI.

Antennae inserted under a frontal ridge; frons with one supraorbital seta; pronotum with one seta anteriorly, or none, cordiform or elongate cordate; body pedunculate; elytra depressed, occasionally pubescent, normally rounded at apex; legs moderately robust; anterior tibiae deeply incised, the spurs very distant from each other; tarsi simple in both sexes.

This tribe has never been considered to be homogeneous. Thus Coscinia, which I removed from it, has two supra-orbital setae, and Melaenus, one of the three genera I include, Bascanus, and its close ally Bascanidius, differ in facies from Melaenus, and while they both have only one supra-orbital seta, there seems to be none on the pronotum and only one in Melaenus. Bascanus and Bascanidius seem to be restricted to the Cape. Melaenus occurs in Senegambia, and has not been hitherto recorded from Central Africa.

## Key to the Genera.

- A<sup>1</sup>. Antennae moderately long, joints thick, all joints except the basal one pubescent.
- B<sup>2</sup>. Mandibles long, porrect, labrum elongate . . . . Bascanus
- B¹. Mandibles short, not porrect, labrum very short, deeply emarginate

Bascanidius

Gen. Melaenus Dej.

Spec., v, p. 481.

Mentum short, with a simple median tooth as long as the sides, the latter rounded at tip; ligula obtuse, slightly shorter than the para-

glossae; apical labial joint ovate, that of the maxillary thickened, broadly truncate at tip; antennae very long, somewhat slender, the 4 basal joints glabrous, the others four times as long as broad; maxillae robust, arcuate, labrum moderately long, transverse, head with a very distinct supra-orbital ridge and one supra-orbital seta set in front of the eye; prothorax cupuliform, much constricted at the base, and with one seta at the fifth part of the length; body pedunculate, scutellum distinct, elytra parallel, normally rounded body behind, quite depressed, epiplural fold very broad at the base; legs moderately robust; tarsi somewhat long, ciliate beneath, claw large, simple.

Melaenus elegans Dej. Spec., v, p. 481. Lacordaire's Genera, pl. vi, f. 2.

Black, opaque, palps piceous brown, legs piceous; antennae long, the 4 basal joints glabrous, piceous, the others clothed with a dense flavescent pubescence; head deeply and coarsely pitted, neck distinct, eyes projecting, with a long conspicuous ridge; pronotum broadly cordiform, almost cupulate, strongly narrowed at the base, where the angle is sharp and sometimes bi-denticulate, the outer margin acute, depressed on the disk, deeply and coarsely and moderately closely pitted, but less so in the vicinity of the deep, distinct median longitudinal line; scutellum small; body pedunculate; elytra with a distinct angular on each side of body, the peduncle, which makes the shoulder sloping, parallel for two-thirds of the length, gradually rounded thence, much depressed, deeply striate, the striae very strongly and closely seriate punctate; the supra-lateral intervals are slightly convex, and the lateral carinate; pectus very deeply and somewhat closely punctate; legs smooth, glabrous; tarsi thickly ciliate underneath.

Length,  $7-8\frac{1}{2}$  mm.; width,  $3\frac{3}{4}-4$  mm.

Locality.—S. Rhodesia (Umtali).

I can see no difference whatever with the Rhodesian example and those from Upper Senegal.

Gen. Bascanus Pér. Descr. Cat., p. 540.

In my description of this genus I indicated the last joint of maxillary and labial palpi as long and very fusiform; these joints, remarkable,

as well as the penultimate ones, for their great length, are fusiform outwardly only, the inner part being very obliquely truncate in both sexes for about half their length, but not quite securiform; there is one supra-orbital seta set at the back of the eye, and I cannot detect any on the pronotal outer margin.

### Bascanidius gen. n.

This genus differs from *Bascanus* in the shorter mandibles, the very short and broadly incised labrum, the less slender pronotum and the more parallel elytra. The last palpal joints are a little more robust and a little more obliquely truncate inwardly (3).

#### Bascanidius dissidens Pér.

Bascanus dissidens Pér., Ann. S. Afr. Mus., vol. v, 1905, p. 290.

### TRIBE LICININI.

Descr. Cat., p. 525.

Characteristic of the Licinidae, as represented in South Africa, are the brevity of the clypeus, the long, deeply cleft labrum, and the shape of the mandibles, which are usually blunt at apex on one side and sometimes on both, when they are deeply scooped inwardly; the maxillae are armed with sharp robust spines. There are two supraorbital setae—a lateral nearly median one on the pronotum, and a puncture, occasionally very indistinct, at the posterior angle of the latter; there is a puncture on the 3rd interval of elytra; in the male the 3 first joints of the anterior tarsi are spongy underneath, the 2 basal joints being triangularly dilated, but the 3rd is occasionally slightly transverse. The palaearctic genus *Licinus* has not to my knowledge been met with in the Ethiopian Region.

## Key to the Genera.

- A<sup>2</sup>. A lateral seta on the pronotum and a distinct puncture at the basal angle. Last joint of palpi slightly fusiform but truncately obtuse at tip Rhembus
- A¹. A lateral seta on the pronotum, no distinct puncture at the basal angle. Last joint of palpi fusiform and sharply acuminate at tip. Antennae very long.
- B<sup>2</sup>. Mandibles short, curved, blunt at tip . . . . . . . Badister
- B¹. Mandibles straight, both scooped inwardly at tip . . . . Atrotus VOL. XXIII, PART 3. 40

Gen. Rhembus Lah. Descr. Cat., p. 536.

In my description (loc. cit.) I have erroneously stated that there are two lateral setae on the pronotum; the basal seta is wanting in the only two examples I have as yet seen, but the puncture is fairly distinct.

Gen. Badister Clairv. Descr. Cat., p. 536.

Badister promontorii Pér. Descr. Cat., p. 536.

I am not sure that the locality, Zambesi, ascribed to this species is valid.

Gen. Atrotus Pér. Descr. Cat., p. 583.

Atrotus forcipatus Pér. Descr. Cat., p. 583.

Locality.—Cape (Cape Town, Stellenbosch).

Atrotus luror sp. n.

Body flavescent, but darker in the median dorsal part, slightly iridescent. Closely allied to A. forcipatus, and might at first sight be considered as an immature form of the latter, but it is smaller, and the shape of the pronotum is slightly different, being also ampliate rounded laterally, but slightly more towards the median part than in A. forcipatus, and although this difference is slight, yet the pronotum is less obliquely attenuate laterally towards the posterior angle, and the base is about the same width as the apex; the elytra are fairly deeply striate with the intervals slightly convex, 3rd interval with a slightly ante-median puncture.

Length,  $5\frac{1}{2}$  mm.; width,  $2\frac{4}{5}$  mm. Locality.—Natal (Malvern). I have seen only one example.

#### TRIBE MASOREINI.

Descr. Cat., p. 542.

### Key to the Genera.

- A<sup>2</sup>. Mentum without a median tooth. Apical part of prosternum without hairs.
- B<sup>2</sup>. Body sub-pedunculate . . . . Aephnidius
- ra . . . . B<sup>1</sup>. Prothorax fitting against the elytra . Anaulacus
- A<sup>1</sup>. Mentum with a median tooth.
- B<sup>2</sup>. Claws not denticulate. Antennae moderately long. Joints not transverse. Apical part of prosternum with a fascicle of hairs.
- B¹. Claws weakly denticulate. Antennae very short. Joints 5-10 transverse. Apical part of prosternum without a fascicle of hairs . . .

## Gen. Aephnidius MacLeay.

Aephnidius madagascariensis Chaud.

Descr. Cat., p. 542.

Locality.—Natal (Malvern); Transvaal (Johannesburg); S. Rhodesia (Salisbury); Mozambique (Beira, Licitinia); Mossamedes (Mossame).

> Gen. Anaulacus MacLeay. Descr. Cat., p. 543.

## Anaulacus carinipennis sp. n.

Rusty red, with the elytra sub-piceous silky and opaque; the shape and sculpture of the head and pronotum are as in A. capensis, but the pronotum is slightly broader, also impunctate and moderately shiny; the elytra are likewise slightly broader, not striate, the suture is carinulate, and at a short distance from it is a highly carinate dorsal ridge, beginning at a distance from the base and reaching to about the same distance from the apex as it does from the base, and another and very much shorter in the median part.

Length, 5 mm.; width, 3 mm. Locality.—Cape (Port Elizabeth).

# Anaulacus pallidus sp. n.

Flavescent, with the prothorax slightly brick-red, a little more robust than the preceding species, but the shape and sculpture of the head and prothorax are alike; in the elytra, however, the suture is more highly carinate; the first dorsal carina is not as acute as in A. carinipennis, and reaches the base; the second one is only feebly indicated and more pronounced from the base to about the median part, but disappears beyond it, and there are traces of a very faint striate on each side of the median carina.

I have seen so far one example only of A. carinipennis and A. pallidus, but I am satisfied that the latter is not an immature example of the former.

Length, 5 mm.; width,  $3\frac{1}{2}$  mm. Locality.—Cape (Cape Town).

> Gen. Somoplatus Dej. Descr. Cat., p. 543.

Somoplatus substriatus Dej. Descr. Cat., p. 544.

Locality.—Cape (Port Alfred, Vryburg); Free State (Bothaville); Transvaal (Pietersburg).

Gen. Microus Chaud. Bull. Soc. Imp. Mosc., 1876, p. 8.

Buccal organs of Somoplatus, and likewise with a tooth in the mentum, but at once differentiated from all the South African species of Masoreini by the great brevity of the antennae, which do not reach the base of the pronotum, and the moniliform shape of the intermediate joints—the second is globular and shorter than the third; the general facies is short, quite ovate; the fore tibiae are plurispinose outwardly, and slightly emarginate after the second outer spine; the mandibles are flat; the short head is deeply set in the pronotum, which is short and very transverse, and plainly arcuate on each side of the base, and having a very weak median longitudinal impressed line; the elytra are more ovate than in Anaulacus, the suture is tectiform, the striae are very indistinct, but some seriate punctures are somewhat visible along the marginal fold; the apical part is not truncate; prosternum rounded and not hairy in front, wedge-shaped behind.

Microus mocquerysi Chaud. Bull. Soc. Imp. Mosc., 1876, p. 9. Rev. and Mag. Zool., 1878, p. 146.

Antennae, palpi, mandibles, labrum, legs, and underside brownish red, upper side black, prosternum shiny, elytra sericeous, opaque;

head smooth, impunctate, the first setigerous orbital puncture very conspicuous; pronotum quite smooth, shiny, with the median line distinct; the outer margin narrowly brownish red; elytra void, fitting exactly against the pronotum, but deeply impressed on each side of the scutellum, moderately convex for two-thirds of the length, and with the suture tectiform for nearly four-fifths of the length; indistinctly impunctate striate, but with the stria above the marginal fold more distinctly and visibly punctate; anterior tibiae with 5–6 outer spines, the two anterior ones separated by a slight emargination from the following ones; metasternal episterna longer than wide and very narrow at apex.

Length,  $4-4\frac{1}{2}$  mm.

Locality.—Natal (Durban).

This species was first captured at Rouen in France. Raffray found it at Pemba Island (Zanzibar). The two examples I examined were captured at Durban by Dr. H. Martin.

#### TRIBE DISPHAERICINI.

The two genera Spanus and Disphaericus should be placed in a subfamily of their own, not in the Stomini, in which they were first included and with which they agree only relatively, nor in the Panagaenini, where they are placed by Kolbe. With some members of the first sub-family the only thing they appear to have in common is a pedunculate thorax. The elongation of the head recalls that of some Panagaeini, but the difference in the shape of the mandibles, distinctly toothed in the median part, the clavate fore femora, the fore tibiae without outer terminal spur or row of spines, and the inner spur very short and incurved, the series and deposition of deep puncture on the supra-epipleural interval, the short joints of the fore and intermediate tarsi, as well as the glabrous body, approximate them to the Pterostichini rather than to the Panagaeini. There are two supra-orbital setae.

# Key to the Genera.

- A². Last papal joint very broadly triangular ; elytra very highly pluri-costate Disphaericus
- ${\bf A^1}.$  Last palpal joint of an elongate bell-shape ; elytra smooth, non-costate Spanus

Gen. DISPHAERICUS Waterh. Descr. Cat., p. 537.

Disphaericus natalicus Westw. (D. natalensis), Descr. Cat., p. 538.

The description I gave (loc. cit.) was made from a partly mutilated specimen. The species differs from both S. ebeninus and S. concinnus in having a supra-lateral impunctate line—like stria obliterated in the fourth anterior part, the space between this line and the supra-epipleural stria slightly tectiform and overlapping the latter; the shape of the prothorax is less elongated than in S. concinnus and less ampliated than in S. ebeninus; the juxta-sutural stria reaches from base to apex, and the punctures are deeper than in any of the two above-named species; the apical puncture is conspicuously large.

Cape (no exact locality).

Gen. Spanus Westw. Descr. Cat., p. 537.

Spanus concinnus sp. n.

Smooth, very shiny; antennae, palpi, and legs rufescent; closely allied to S. ebeninus Chaud.; differs mostly in the shape of the pronotum, which is one-third longer than broad, and elongate with the sides straight, whereas in S. ebeninus it is well ampliate, being nearly as broad as long, and slightly wider across the base than across the apex; the shape and sculpture of the elytra are the same, but the juxtasutural punctate stria reaches only to the rounding of the posterior declivity instead of the apex, and there is a conspicuous puncture close to, but of course outside, the supra-epipleural series of punctures, which are, however, deeper in S. ebeninus, in which species the puncture is less distinctly outside the series. Underside smooth, the setigerous punctures of the abdominal series deep; intermediate tarsi nearly as much dilated as the anterior in the male, all densely spongy underneath, hind ones densely ciliate.

Length, 6 mm.; width, 2 mm. Locality.—Cape (Fort Beaufort).

### TRIBE PTEROSTICHINI.

Descr. Cat., p. 544.

The South African species are included into three groups: Drimostomides, Abacetides, Pterostichides. The first two groups are homo-

geneous, the third is not, the facies of the species being often strongly dissimilar; but in spite of differences in detail there is little doubt that they all belong to one and the same group, which I have, however, divided into two sections. The first includes eight genera of a pure African type, and one the facies of which has some resemblance to palaearctic forms. It is in the second, however, that this resemblance is carried to a greater degree of similarity. In my Descriptive Catalogue I included a number of species in the genus Pterostichus (olim Feronia), being, I think, justified by finding in the South African species many characters which are characteristic of the palaearctic species. Tschitschérine has, however, proposed a new division of the South African species, founding some new genera and several subgenera. Some of his new genera I have now adopted; the others I have raised to genera, and I have added two, admitting, however, that the characters ascribed to most of them are not always of important generic value; but this arrangement makes identification easier.

Moreover, there is a very important point in adopting this new division. So far as we know, none of the forms included in that Section II have yet been met with outside South Africa, the Transvaal being the most northern limit. One species described by Fairmaire as an Omaseus, a genus well represented in the Palaearctic Region, O. relexicollis, from Usagara, Central Africa, is pronounced by Tschitschérine to be an Abacetus, a genus extremely rich in species in Africa. This absence of intermediate forms is very striking. If it proves to be true, it makes it difficult to explain satisfactorily the retention of general facies and something more in localities so very remote, except on the hypothesis of convergence to a type or facies moulded by environment or habit.

The South African species inhabit both plain and mountain. Two species, *C. chalcostoma* and *C. captatrix*, are found in the same locality, the first in the plain, the other on the mountain slopes from 800 to 1000 feet. *Mosuta alticola* has been met at an altitude of 8500 feet; it is therefore possible that alpine Central African forms of the same type may still be met, thus bridging the gap.

#### Drimostomides.

Mentum with a sharp median tooth; antennae short, joint 2 normal, 4-10 subquadrate; joints of posterior tarsi not sulcate; no scutellary striae. Anterior tarsi with a few minute spines outwardly . . . . Gen. Stomonaxus

#### Abacetides.

Mentum with a broad triangular median tooth; antennae long, joint 2 set on the outer side of the axis of the first; 4-10 not quadrate; joints of hind tarsi long, sulcate or not; no scutellary striae . . . Gen. Abacetus

Pterostichides.
Section I.
<ul> <li>A². Mentum with a median simple tooth.</li> <li>B². No scutellary stria. Antennae reaching the base of the prothorax or a little further.</li> </ul>
<ul> <li>C². No setigerous puncture on 3rd interval of elytra. Basal joint of hind tarsi not longer than the three following. Elytra as broad as the thorax.</li> <li>a². Tibiae not grooved inwardly. Anterior tibiae with obsolete spines except the apical.</li> <li>b². Prosternal projection not prolonged; upper edge of abdominal segments foveolate punctate</li></ul>
<ul> <li>b². Body elongate oblong, upper edge of the four abdominal segments not foveolate punctate</li></ul>
<ul> <li>a². Body somewhat broad and short; elytra with an apical rufescent patch</li></ul>
B¹. A scutellary stria.  C². Body broad, depressed; antennae very short
Section II.
A <sup>2</sup> . Mentum with a bifid tooth.  B <sup>2</sup> . Metasternal projection glabrous; the first four joints of anterior tarsi dilated in the male; tibiae not canaliculate. Episterna somewhat broad and not

- much elongated. First stria of elytra diverging at the base, a more or less distinct scutellary striole.
- C2. Body black, shiny, elytra moderately convex.
  - a4. Pronotum rounded laterally behind, not as broad at base as at apex; shoulders rounded.
  - b2. Intermediate tibiae incurved in both sexes, broadly flattened at apex in the male; the three basal segments of abdomen with a transverse sulcus . Camptoscelis

b1. Intermediate tibiae simple; the three basal segments of abdomen
simple except in C. laetans Cophosomorpha
a <sup>3</sup> . Pronotum very slightly sinuate laterally behind, but nearly as broad
at base as at apex; shoulders sharp, even dentate.
$b^2$ . No strong ridge above the eye Sthenocranion
$b^1$ . A strong ridge above the eye
a <sup>2</sup> . Pronotum nearly parallel or slightly attenuate towards the base but not
sinuate there; 7th interval of elytra not highly raised in anterior
part Macquena
a <sup>1</sup> . Prothorax sub-cordate; shoulders slightly rounded. The three apical
segments of abdomen with a transverse sulcus at the base Mosuta
C1. Body black opaque, elytra depressed; pronotum quite straight; 8th stria
of elytra obliterated; intervals highly carinate Wahlbergia
B1. Metasternal projection pluri-setose at apex; the first four joints of anterior
tarsi simple in both sexes. Intervals plane, 7th raised; elytra depressed
near the base.
C <sup>2</sup> . Episterna broad
C <sup>1</sup> . Episterna elongated
A <sup>1</sup> . Mentum with a sharp median tooth; elytra metallic, no sutural stria
Chalcochroma

#### DRIMOSTOMIDES.

Gen. STOMONAXUS Motsch.

Drimostoma Pér., nec. Dej.

Descr. Cat., p. 556.

In this genus the fore tibiae have two or three more or less distinct sutural spines in addition to the terminal; the hind tibiae are grooved on each side, but have no spine on the upper side.

# Key to the Species.

Α	rromorax	a mu	e i	oroader	unan	long,	ais	uncuy	sinuate	Ia	teran	y m the
	posterio	r part.										
$B^2$ .	Elytra dist	inctly	cos	tate.								
$C^2$ .	Size larger											laticoll is
C1.	Size smalle	r.									. n	atalensis
$\mathbb{B}^{1}$ .	Elytra not	disting	tly	costate								spurius
A1.	${\bf Prothorax}$	one-th	rd	broader	than	long,	not	sinuate	lateral	ly,	poste	rior part
											a	maroides

Stomonaxus laticollis Boh.

Descr. Cat., p. 556.

Locality.—Cape (Uitenhage, Dunbrody, Transkei, Kentani).

# Stomonaxus natalensis Pér.

Descr. Cat., p. 556.

I have not obtained any other example of this species than the type which reproduces on a much lesser scale the form *laticollis*, but the intervals are convex, not hardly convex as I stated probably through a lapse of the pen.

#### Stomonaxus spurius sp. n.

Chestnut brown with the head darker, and occasionally piceous. It is very closely allied to *S. laticollis*, but is a little larger; the shape of the pronotum is the same, but the intervals of the elytra are not convex in the discoidal part and not as highly costate laterally; the punctures of the striae are also less plain, although in the last-named species they are not conspicuous, and the antennae are slightly longer.

Length,  $7\frac{1}{2}$ -8 mm.; width,  $3\frac{1}{2}$  mm. Locality.—Natal (Durban, Malvern).

#### ABACETIDES.

Gen. Abacetus Dej. Descr. Cat., p. 545.

In my description of the genus I omitted to mention the peculiar insertion of the second antennal joint, which is set on the outer axis instead of the centre of the first, and which is thus a peculiar characteristic of the group. A second omission is the presence of a setigerous puncture on the 3rd interval of the elytra, and the absence of a prescutellary stria or striole. The puncture on the 3rd interval of elytra is not situated always slightly past the median part; it may be slightly ante-median (inopinus, evulsus, etc.) or long past the middle (obtusus); only in one case (shilouvanus) is it completely absent. I have seen one example only of this species, but it is not always distinct in certain examples of the same species.

The genus is very poorly represented in the western part of the Union, where rains are more occasional than in the eastern part, which is rich in species, and examples are numerous.

A calligraphic error, p. 545 of the Descriptive Catalogue, puts "Martaban" in South America. The error is of course obvious. The genus has no representative in America, and it is not certain that true Abacetus occur in Australia.

# Key to the Species.

A <sup>2</sup> . Prothorax and elytra glabrous.	
B <sup>3</sup> . Intermediate and posterior tarsi trisulcate.	
C <sup>2</sup> . Inner spur of anterior tibiae bi- or trifid.	
a <sup>2</sup> . Striae of elytra punctate palustris	;
a <sup>1</sup> . Striae of elytra impunctate.	
$b^2$ . Antennae normally slender.	
c <sup>2</sup> . Body larger; intervals of elytra tectiform auspicatus	
c <sup>1</sup> . Body smaller; intervals of elytra less tectiform nigrinus	
b <sup>1</sup> . Antennae conspicuously thickened.	
c². Base punctate, antennae and legs black	
c <sup>1</sup> . Base impunctate, antennae and legs red proximus	
C <sup>1</sup> . Inner spur of anterior tibiae simple, or very slightly bifid.	
a <sup>2</sup> . Antennal joints of normal thickness.	
b <sup>3</sup> . Prothorax cordate; intervals of elytra raised, tectiform . mashunus	
b <sup>2</sup> . Prothorax sub-cordate; intervals of elytra moderately raised on the	
disk emeritus	
b <sup>1</sup> . Prothorax very little sinuate above the hind angle.	
c². Anterior tibial spur slightly bifid; puncture on 3rd interval of elytra	
strong vexator	
c <sup>1</sup> . Anterior tibial spur simple; puncture on 3rd interval faint	
propinguus sp. n. *	
$a^{1}$ . Antennal joints thickened.	
b3. Prothorax cordiform; intervals of elytra sharply tectiform. lautus	
b <sup>2</sup> . Prothorax ampliate rounded laterally, not sinuate past the middle.	
Elytra iridescent.	
$c^2$ . Antennae fuscous, legs black, tarsi fuscous pavoninus	
$c^1$ . Antennae red, legs and tarsi red.	
d <sup>2</sup> . Prothorax entirely black dilucidus	
c¹. Prothorax with a rufescent border nitens	
$b^1$ . Prothorax parallel from the median part to the basal angle.	
c <sup>2</sup> . Sides slightly sinuate behind. Antennae and legs fuscous or black	
lucidulus	
c¹. Sides straight.	
$d^2$ . Antennae and legs red parallelicollis	
d¹. Legs black	
B <sup>2</sup> . Tarsi sulcate outwardly only, sometimes very faintly.	
C4. Prothorax sub-cordate, not sinuate laterally behind. Base of prothorax	
hardly narrower than apex, legs piceous.	
a <sup>2</sup> . Larger size servitulus	
a <sup>1</sup> . Smaller size delagoensis	
C <sup>3</sup> . Prothorax cordate, not sinuate laterally behind, base narrower than apex,	
legs red	
C <sup>2</sup> . Prothorax strongly cordate, sinuate laterally behind. Antennal joints other	
than the three basal ones black; legs red; elytra iridescent . vertagus	
than the three basar ones brack; legs red; erytra fridescent . terragus	

<sup>\*</sup> The full description of this species was not found among the late Dr. Péringuey's papers.—[Ed.]

C¹. Prothorax broadly cordate, strongly ampliate anteriorly.  a³. Antennal joints fuscous; legs piceous; elytra black congruens  a². Antennal joints all red; legs red; elytra black, iridescent . optimus  a¹. Antennal joints black; legs piceo-aeneous; elytra dark bronze  diversus
B <sup>1</sup> . Tarsi not sulcate.
C <sup>2</sup> . Prothorax sub-orbicular, or not sinuate laterally behind. Intervals of elytra
quite plane. Frontal sulci neither deep nor strongly arcuate.
a <sup>3</sup> . Black, shiny, with a metallic tinge; basal joint of antennae and legs red.
$b^2$ . Basal part of prothorax impunctate
c². Basal angle sharp minutus
c¹. Basal angle rounded fraternus
b <sup>1</sup> . Basal part of prothorax punctate perplexus
a <sup>2</sup> . Black, with a bronze tinge; antennae wholly black.
b <sup>2</sup> . Legs black; base of prothorax punctate; elytra not transversely
impressed on the disk agilis
$b^1$ . Legs piceous red; base of prothorax impunctate; elytra transversely impressed on the disk
a <sup>1</sup> . Black, shiny; legs black, tarsi rufescent; antennal joints except basal
ones black; base of prothorax punctate
C <sup>1</sup> . Prothorax strongly cordate. Frontal sulci deep and strongly arcuate.
$a^2$ . Species non-metallic.
b <sup>5</sup> . Elytra black; tarsi rufescent metalensis
b4. Elytra iridescent; antennae fuscous; legs red conformis
b <sup>3</sup> . Elytra black; antennae and legs bright red obtusus
$b^2$ . Elytra not depressed.
c². Base of pronotum impunctate.
d <sup>3</sup> . Pronotum moderately sinuate laterally alacer
$d^2$ . Pronotum distinctly sinuate laterally nanus
d <sup>1</sup> . Pronotum wider and more cordiform umtalensis
c <sup>1</sup> . Base of pronotum punctate inopinus
b¹. Elytra depressed. Facies very elongate; elytra chestnut brown
trechoides
a <sup>1</sup> . Upper side with a metallic sheen.
b4. Pronotum cordiform, plainly sinuate laterally towards the base.
$c^5$ . Upper side shiny black with a faint metallic sheen. $d^2$ . Antennae and legs black
$d^2$ . Antennae and legs black
c <sup>4</sup> . Upper side metallic green or bronze.
d <sup>3</sup> . Base of pronotum aciculate; antennae and legs fuscous red
perturbator
d <sup>2</sup> . Base of pronotum not aciculate, antennae and legs rufescent
nanniscus, cursor
$d^{1}$ . Base of pronotum closely punctate; antennae and legs rufescent
pygmaeus
c <sup>3</sup> . Upper side metallic green, prothorax cordate majorinus
c <sup>2</sup> . Upper side chalceous or greenish black, base of pronotum closely punctate.

- A1. Pronotum and elytra pilose.
- B<sup>2</sup>. Pronotum strongly cordate, convex and narrowly attenuate behind; prothorax and alternate interval of elytra with setigerous pits . setulosus
- B¹. Pronotum moderately cordate, and bearing like the elytra a lateral fringe of setae; the striae of the latter plane, deeply and regularly punctate

pilosellus

Abacetus pavoninus Pér.

Descr. Cat., I. Suppl., p. 360.

Locality.—Natal (Durban, Malvern); Transvaal (Shilouvane); S. Rhodesia (Umtali).

Abacetus dilucidus Pér.

Ann. S. Afr. Mus., vol. iii, 1904, p. 192.

Syn: A. jucundulus Pér., loc. cit., p. 193.

Syn: A. mimus Pér., loc. cit., p. 193.

Abacetus nitens Tschits.

Hor. Soc. Ent. Ross., vol. xxxii, 1898, p. 430.

Locality.—S. Rhodesia (Sebakwe).

This species, which was described from Boma, in the Congo, is represented by a type in the S.A. Museum Collection.

# Abacetus parallelicollis sp. n.

Piceous red, elytra with blue, highly iridescent elytra. Easily distinguished from its South African congeners of the same group by the nearly parallel prothorax, which is only slightly attenuate rounded laterally anteriorly for about a sixth of the length; the base is indistinctly plicate in the centre, the intervals of the oblong elytra are plane;  $(\mathfrak{P})$  the underside is piceous red, and with the abdomen darker;

the legs, palpi, and labrum are red, the antennae fuscous with the exception of the basal joint, which is red.

Length, 9 mm.; width,  $3\frac{3}{4}$  mm. Locality.—S. Rhodesia (Umtali).

Abacetus alienus nom. nov.

Syn: A. diversus Pér. (nom. preocc.). Ann. S. Afr. Mus., vol. iii, 1904, p. 191.

#### Abacetus delagoensis sp. n.

A very close ally of *servitulus*, but much smaller, and the prothorax is more ampliated laterally in proportion to the size, and more rounded towards the posterior angle; it is black, with the elytra sub-iridescent, with the intervals plane; the three basal joints of antennae and the legs are piceous red, the palpi rufescent.

Length,  $6\frac{1}{2}$  mm.; width,  $2\frac{3}{4}$  mm. Locality.—S. Rhodesia (Salisbury); Mozambique (Rikatla).

> Abacetus optimus Pér. Ann. S. Afr. Mus., vol. iii, 1904, p. 195. Syn: A. clarus Pér., loc. cit., p. 196.

# Abacetus congruens sp. n.

Allied to the preceding species, but more slender; the prothorax is also greatly ampliated in the centre, but the posterior part from slightly past the middle is very distinctly attenuate, thence towards the base, and has thus a more broadly cordiform appearance, although the supra-basal sinuation is not much marked; the elytra are narrower and therefore more parallel than in A. optimus; the antennae are fuscous or even black, except the first joint, which is red, and the legs are either black or dark piceous, and the elytra are deep black with occasionally a faint iridescent sheen.

Length,  $6\frac{1}{2}$  mm.; width, 3 mm. Locality.—S. Rhodesia (Umtali).

 $Abacetus\ fraternus\ {\bf Tschits.}$ 

Hor. Soc. Ent. Ross., vol. xxxii, 1898, p. 539.

Dark bronze, shiny, the tibiae with a faint rufous tinge. Very closely allied to A. minutus, but the metallic sheen is more bronzy

and approximates that of A. chalceus, and the shape of the pronotum is as in the last-named species—that is to say, the basal angle is rounded and not aculeate as in A. minutus; the base has no punctures. From A. chalceus it differs in the less ampliate pronotum and the plane, not transversely impressed, intervals of the elytra.

Length, 8 mm.; width, 3 mm. Locality.—Cape of Good Hope.

Abacetus perplexus Pér. Descr. Cat., p. 552.

Syn: A. aenescens Pér., loc. cit., p. 553.

Syn: A. chalcites Pér., loc. cit., p. 552.

Locality.—Cape (Worcester).

#### Abacetus concors sp. n.

Black, shiny, palpi and the three basal antennal joints red, legs piceous red; the antennae are long, with the median joints plainly thickened; the prothorax is ampliate rounded laterally for two-thirds of the length, thence gradually narrowed towards the basal angle, but not sinuate, the base being slightly wider than the apex, and deeply punctate at the centre; the elytra are of an oblong shape, but with hardly any sloping at the humeral part; the intervals are plainly convex ( $\mathcal{P}$ ).

A difficult species to place. The thorax is less cordate than in the A. natalensis group, and, moreover, the base is deeply punctate.

Length,  $5\frac{1}{2}$  mm.; width,  $2\frac{1}{4}$  mm.

Locality.—Natal (Durban).

Abacetus natalensis Chaud.

Descr. Cat., p. 549.

Locality.—Natal (Malvern); S. Rhodesia (Salisbury, Umtali).

Abacetus conformis Pér.

Descr. Cat., p. 607.

Black, with the antennae fuscous, and the legs dark red, sometimes fuscous, tarsi rufescent; elytra shining black with a slight iridescence. Closely related to A. natalensis, but differs in the shape of the pro-

thorax, which is not quite so broad in proportion to the width of the elytra, being slightly narrower at its widest part than at the humeral part of the elytra, whereas in A. natalensis it is nearly equal; the elytra are slightly iridescent, whereas in A. natalensis they are intensely black, and the intervals of the elytra are plainly less carinate.

Length,  $6\frac{1}{2}$ -7 mm.; width, 3 mm. Locality.—Cape Colony (Uitenhage).

#### Abacetus umtalensis sp. n.

A very close ally to A. nanus. The prothorax, however, is plainly more cordiform, and wider in the anterior part, the colour is rufopiceous, as in A. nanus.

Length, 5 mm.; width, 2 mm. Locality.—S. Rhodesia (Umtali).

Abacetus pygmaeus, Boh. Descr. Cat., p. 550.

A. viarius Pér., Descr. Cat. Suppl., p. 359.

Locality.—Cape (Caledon, Kimberley); Natal (Lower Umkomaas River).

Abacetus majorinus Pér.

Descr. Cat., p. 550.

Locality.—Cape (Uitenhage); Natal (Lower Umkomaas, Tugela River).

My example from Uitenhage is much more numerously punctured along the base than the type.

# Abacetus zambesianus sp. n.

Greenish on the upper side with a chalceous tinge; the first and second antennal joints are red, the second and third, however, being somewhat fuscous; the remainder are deeply infuscate; the prothorax is plainly cordate, and as broad as long, the base is deeply and somewhat closely punctate, the punctures being deep; the oblong elytra are somewhat longer in proportion than the other species of this group, striate with the intervals plane; femora fuscous, tibiae and tarsi slight flavescent.

The elongate form of this species approximates somewhat that of A. agilis Pér., which, however, belongs to another and well-defined group. I have seen one example only from Pemba, on the northern side of the Zambesi. This might appear to be an extraneous locality,

but it is not, as it comes within the limit of the South African fauna, viz. south of the 15th parallel south.

Length, 6 mm.; width,  $2\frac{1}{2}$  mm. Locality.—Rhodesia (Pemba).

#### Abacetus mashunus sp. n.

Dark blue, but sometimes light bronze on the upper side; the legs sub-piceous red; the prothorax is broadly cordate, strongly narrowed at the base, which is strongly punctate, but sometimes sparingly so; the intervals of the elytra are sub-tectiform or moderately plane, according to the sex.

It differs from A. descrepans, a near ally, by the much more cordate prothorax, and also the colour of the upper part.

Length,  $4\frac{1}{4}$  mm.; width,  $2\frac{1}{4}$  mm.

Locality.—S. Rhodesia (Salisbury, Sebakwe).

Abacetus pumilus, Boh. Descr. Cat., p. 551.

Locality.—S. Rhodesia (Sebakwe).

Abacetus setulosus, Chaud. Rev. and Mag. Zool., 1878, p. 136.

A very distinct species. Black, shiny, with the palpi and legs flavous; the three basal joints of the antennae are red, the three following fuscous, and the others pale flavescent; the prothorax is convex, globose, but narrowly attenuate towards the base, sprinkled with coarse punctures bearing each a long hair; the base is roughly punctate, the elytra are twice as broad at the shoulders as the narrow base of the prothorax, with the angles moderately rounded, very deeply striate, with the intervals carinate and alternately roughly punctate on one side, the punctures bearing a long rigid seta.

Length, 4½ mm.; width, 2 mm.

Locality.—N. Rhodesia (Pemba); S. Rhodesia (Sebakwe, Salisbury, Umtali).

Described originally from Zanzibar (Pemba Island).

Abacetus pilosellus Pér. Descr. Cat., I. Suppl., p. 361.

Syn: A. jubatulus Pér., Ann. S. Afr. Mus., vol. iii, 1904, p. 200.

 ${\rm Syn:} \ A. \ pilosulus \ {\rm P\'er.}, \ loc. \ cit., \ {\rm p. \ 200.}$  Vol. XXIII, part 3.

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#### PTEROSTICHIDES. I.

Gen. CYRTOMOSCELIS Chaud. Descr. Cat., p. 559.

It would appear that I have mixed Cyrtomoscelis natalensis Chaud. with Argutor trivialis Boh. I do not remember having seen the former, whereas I have compared my specimens with authenticated examples of the latter, which I now place in a new genus which differs from Cyrtomoscelis in having the outer margin of the anterior tibiae distinctly pluri-spinose and the hind tarsal joint grooved, whereas in Cyrtomoscelis the fore tibiae are spineless and the hind tibiae and tarsi are not grooved.

Cyrtomoscelis natalensis Chaud. Bull. Mosc., 1873, p. 63.

My description of *C. trivialis* applies to this species. It was, in fact, made from an example of *Cyrtomoscelis*; the pronotum is much more parallel than in *Berea caffra*, owing to it being less attenuate and hardly rounded in the anterior lateral part; the longitudinal central line is so faint as to be difficult of detection.

In general appearance it closely resembles *B. caffra*, but is at once differentiated by the absence of spines on the upper side of the fore and hind tibiae; the latter are also not grooved, nor is the basal joint of the hind tarsi.

BEREA, gen. n.

Cyrtomoscelis Pér., nec. Chaud. Descr. Cat., p. 558.

To my description may be added the following: Anterior tibiae with strong spines outwardly, intermediate numerously; posterior sparsely spinose, the four upper spines in the latter set on a slightly dentate projection, forming on the edge of the slightly arcuate tibia a sort of sinuation; the hind tibiae are grooved inwardly, and the basal joint of the hind tarsi is also grooved.

Berea trivialis Boh. Descr. Cat., p. 559.

In some examples the median impressed line on the prosternum is ill-defined.

# Berea caffer sp. n.

Piceous, with the elytra darker and slightly iridescent; more elongate than B. trivialis and less oblong; the sculpture is identical, but the pronotum being more elongate is nearly as long as broad, is attenuate forward laterally for a shorter distance, and thus appears more parallel; the median longitudinal impressed line is sometimes difficult to detect; the elytra are also more elongate and narrower in proportion than in C. trivialis; the rest as in the former.

Length, 8 mm.; width,  $3\frac{1}{4}$  mm. Locality.—Cape (Transkei, Kentani).

#### Inkosa gen. n.

The sculpture of the head is very different from that of *Berea*; the frontal sulci are very deep and broad, and edged laterally by a highly raised border; the lateral puncture of the labrum is very deep and broad; the head, owing to shortness of neck, is deeply set in the pronotum, which is much broader in the anterior part in spite of the prominence of the eyes; the pronotum has a distinctly sulcate border, and is as broad at the base as the elytra; the legs are as in *Berea*.

# Inkosa latiuscula sp. n.

Black, shiny, not iridescent; palpi and antennae rufescent; legs reddish brown. Head with the frontal impressions broad, deep, and edged with a high border above the eyes; lateral puncture of the labrum fossate; prothorax twice as broad as the head at apex, attenuate rounded laterally to about the median part, where it is twice as broad as long, straight thence to the base, where it is as wide or nearly so as the shoulders; outer margin sharp, reflexed, no scutellary striole; elytra with the intervals only moderately convex on the disk, the convexity more pronounced laterally, especially in the  $\sigma$ ; the striae apparently impunctate, underside smooth, the three abdominal segments with a series of deep punctures along the anterior border; anterior and intermediate tibiae spinose outwardly, posterior a little arcuate, grooved, and with a few spines. Easily recognised by its ampliate facies.

Length, 7 mm.; width, 4 mm. Locality.—Natal (Kranzkop).

Gen. Celioschesis Tschits.

Hor. Soc. Ent. Ross., vol. xxxii, 1898, p. 93.

Head small, eyes convex and projecting; frontal sulci well defined; outer border of the intermediary (especially) and posterior tibiae set with more numerous spinules; first joint of the intermediate and hind tarsi much elongated, yet not longer than the three following; first joint of the anterior tarsi (dilated) almost triangular, slightly longer than the second; paraglossae projecting a little beyond the apex of the ligula. Elytra with or without red spot; third interval with a small poriferous puncture.

The characteristics of this genus are given by Tschitscherus as approximating those of *Cyrtomoscelis*, which was unknown to him except from description. He includes in it *Feronia trivialis* (*Berea*) Boh., which, it can be safely assumed, was also unknown to him, and which has no puncture on the 3rd interval of elytra. It is therefore a matter of doubt if the species I refer to the genus is correctly placed, yet I believe it to be allied to, if not identical with, the type of the genus—i.e. *C. distigma* Tschits. The species of this genus are said by him to be met with in the eastern part of South Africa and in Madagascar.

Celioschesis longicornis Pér.

Suppl. Descr. Cat. (Drimostoma), p. 363.

As I stated in my description, the general facies of this species approximates it to a certain extent to *Stomonaxus amaroides*, but it does not belong to the same group of the *Pterostichini*, as well instanced by the length of the antennae, etc.; the general facies of the only species known to me approximates a little that of *Inkosa latiuscula*, but is not so massively ampliate, and the 3rd interval bears a distinct deep poriferous puncture set a little past the median part. In comparison with *C. distigma* Tschits. it seems to be a little more parallel.

 $Celioschesis\ distigma\ {\it Tschits}.$ 

Hor. Soc. Ent. Ross., vol. xxxii, 1898, p. 97.

I have not been able to identify the species on which Tschitschérine founded the genus. His extremely long description may be condensed as follows:

"Bright blackish brown above, with a very slight iridescence on the elytra; mandibles glabrous; the lateral fold and the posterior angles of the pronotum, the lateral fold of the elytra, and a small, elongate spot not far from the apex extending on the 2nd interval and impinging on the 3rd, reddish; legs, antennae, and palpi ferruginous red; pronotum transverse, 1.5 as wide as long, strongly narrowed in front but very little behind, widest in the middle, angles obtuse, sides regularly arcuate, but the arcuation more pronounced at the first third of the length, slightly convex in the centre; the median impressed line reaches neither base nor apex, the space separating the sides from the lateral fold is slightly depressed; the hind piliferous pore is situated not in the groove, as is usually the case, but on the external fold at the very summit of the angle. Elytra not quite 1.5 time as long as wide, 2.5 as long, and 1.16 times as broad as the pronotum, and having its greatest width at about the median part; the base is not wider than that of the pronotum and fits against it, the first fifth of the length of the sides is slightly arcuate towards the shoulders, thence nearly parallel to slightly past the middle, and from there moderately arcuate; the shoulders are not rounded, although slightly obtuse; the striae are strongly marked, and become deeper still towards the apex; the intervals are moderately convex; prosternum entirely smooth; episterna slightly punctuate; sides of abdominal segments punctate and slightly rugolose."

Length,  $8\frac{1}{2}$  mm.; width,  $3\frac{1}{2}$  mm.

Locality.—Portuguese East Africa (Delagoa Bay).

Gen. Exocus Pér. Descr. Cat., p. 557.

In my description of the genus I omitted to mention the deep, subtransverse, slightly supra-basal impression on the median longitudinal line of the pronotum.

> Exocus ferrugineus Pér. Descr. Cat., p. 557.

There are reasons to believe that *E. ferrugineus* is termitobious. Mr. Bell-Marley found one in a termite nest at Karkloof, Natal, and Father O'Neil informs me that he captured an example coming out of a termitarium. He adds that it is taken at light pretty often.

Locality.—Natal (Durban); Transvaal (Trichardt); S. Rhodesia (Bulawayo, Salisbury, Sebakwe); N.-E. Damaraland.

#### Exocus pulcher sp. n.

The description of *E. ferrugineus* applies to this species, the point of disemblance being the shape of the pronotum, which, instead of being slanting laterally in a straight line from the median part to the basal angle, is plainly sinuate there with the basal angle thus made more distinctly acuminate; the striae are seemingly slightly less plainly punctate, but the intervals are alike.

Length, 9 mm.; width, 4 mm. Locality.—S. Rhodesia (Insiza).

Gen. Atimus Pér. Descr. Cat., p. 555.

Atimus crenatostriatus Pér. Descr. Cat., p. 555.

Locality.—Cape (Kimberley, Prieska).

#### PTEROSTICHIDES. II.

Gen. CAMPTOSCELIS Dej. Spec. Col. III, 1828, p. 420.

Camptoscelis hottentota Oliv. Pterostichus Pér., Descr. Cat., p. 608.

# Camptoscelis dissidens sp. n.

Colouring, size, and general facies of C. hottentota, but it is more elongate, the elytra are more parallel, the lateral posterior part is much more plainly sinuate, and the base itself is thus more narrow, being only one-half of the width of the apex instead of a little more than two-thirds in C. hottentota; 3rd interval of elytra with a distinct median setigerous puncture; abdomen and legs (3) as in the preceding species.

Length, 18½ mm.; width, 6 mm.

I have seen only one example of this species collected by Ecklon and Zeyher, and figuring in their list of insects as C. hottentota Oliv.

#### Gen. COPHOSOMORPHA Tschits.

# Hor. Soc. Ent. Ross., vol. xxv, 1891, p. 154.

Pér., Descr. Cat., p. 560.

#### Key to the Species.

- A<sup>2</sup>. Outer margin of pronotum not highly reflexed from the median part to the base. Intervals of elytra nearly plane.
- B<sup>2</sup>. Elytra oblongo-ovate.
  - $c^2$ . No puncture on the 3rd interval of the elytra.
  - a<sup>2</sup>. Intervals of elytra not highly tectiform . . . . dichron
  - a<sup>1</sup>. Intervals of elytra highly tectiform . . . . pseudodichroa
  - c¹. A median and a supra-apical puncture . . . . . elizabethae
- B1. Elytra oblongo-elongate.
- C<sup>2</sup>. Third interval of elytra with two punctures.
  - $a^2$ . Elytra strongly sinuate at apex, the suture dentate in the  $\mathcal{S}$ . A postmedian puncture and a supra-apical one . . . caffra
  - $a^{1}$ . Elytra normal at apex.
  - b6. A post-median puncture and a supra-apical one; elytra opaque soror
  - $b^5$ . A puncture at the apex of the first anterior third of the length and another at the base of the third.
  - $c^2$ . Pronotum more attenuate at base . . . . . . anceyi
  - c<sup>1</sup>. Pronotum less attenuate at base . . . . blaisea
  - $b^4$ . A puncture past the median part of the length and another nearly equi-distant from the first and the apex . . . capicola

  - b<sup>2</sup>. A puncture near the basal part and another in the centre . lugubrina
  - $b^1$ . A single puncture in the centre . . . . . . . modesta
- A¹. Outer margin of pronotum highly reflexed from the median part to the base.

  Intervals of elytra sub-carinate or tectiform.
- B<sup>2</sup>. Third interval of elytra without puncture . . . . natalensis
- B<sup>1</sup>. Third interval with an ante-median and a post-median puncture lactans

The species of this genus seem to be very local, and the number will probably be greatly increased for this reason.

# Cophosomorpha pseudodichroa sp. n.

Very closely allied to C. dichroa, and almost alike except for the much more tectiform shape of the intervals of the elytra.

The only example I have seen was sent me by Mons. Rene Oberthür, and bearing the label, "Capicola Chaud.," but without any record of locality.

Length, 15 mm.; width, 5 mm.

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#### Cophosomorpha elizabethae sp. n.

Black, shiny, antennae, palpi, and legs piceous rufescent; head of the normal shape and sculpture; pronotum a little wider than the head, narrower at the base than at the apex by one-fourth, with the sides arcuate, the arcuation more strongly defined in the third posterior part, but with the margin very little reflexed towards the posterior angle if compared with *C. dichroa* owing to the more shallow posterior lateral depression on the disk the surface of which is indistinctly plicate transversely, as in *C. dichroa*, but the median part of the base is distinctly striate vertically; the elytra are strongly oblongo-ovate, with the basal angles distinct and even sharp, narrowly striate, with the striae impunctate except for the normal series of foveae, which is interrupted towards the middle of the 8th stria; intervals tectiform, third with a median and a supra-apical puncture, fold of outer margin strongly defined; underside smooth, but with an ill-defined plication laterally; legs normal.

Length, 13 mm.; width, 5 mm. Locality.—(Port Elizabeth). Type ubi?.

> Cophosomorpha caffra Dej. Descr. Cat., p. 562.

This species is easily recognised by the strong lateral sinuation of the posterior part of the elytra, the apical part of which is almost dentate, the posterior border almost truncate, and the suture bluntly dentate on each side.

Some errors seem to have crept into the habitat I gave for this species. I have recorded it only from Port Elizabeth, Graham's Town, and now Cape Town. The localities Somerset East and Seymour do not apply to this species, and Port St. John and Durban are erroneous.

# Cophosomorpha blaisea sp. n.

Closely allied to *C. anceyi*, but the pronotum is laterally more ampliate owing to it being less attenuate the median part to the outer angle, which is also more angular, and the basal depression is deeper and broader; the elytra are slightly less parallel from the base to past two-thirds of the length; the intervals are a little more tectiform, and on the third there are two punctures, the first at about one-third of the length, and the other at a slightly shorter distance from the first than the first is from the base. The rest as in *C. anceyi*. In the

only example I have seen (3) the second puncture is obliterated on the left side.

Length, 15 mm.; width, 5 mm.

Locality.—Cape (Mossel Bay, Cape St. Blaize).

## Cophosomorpha propinqua sp. n.

Black, shiny, with the antennae and the abdomen piceous red. The general facies is that of C. capicola and C. lugubrina, especially the latter, but the disposition of the punctures on the 3rd interval is different, the first being slightly ante-median and the second situated near to the apex; the intervals of the elytra are very slightly convex, the 5th not much more so at the base than the others  $(\mathfrak{P})$ ; the last segment of the abdomen has a distinct transverse basal groove obliterated in the centre.

Length, 13 mm.; width, 5 mm.

Locality.—Cape (Cape Town).

Closely allied to *C. lugubrina*, but easily differentiated by the disposition of the two setigerous punctures on the 3rd interval of the elytra, and the transverse lateral groove on the last abdominal segment. The examples examined are all females.

# Cophosomorpha modesta sp. n.

The description of *C. propinqua* suits this species, which is, however, shorter, and with the elytra more ovoid. The 3rd interval bears only one exactly median setigerous puncture.

Length, 11 mm.; width, 4 mm. Locality.—Cape (Port Elizabeth).

# Cophosomorpha diversa sp. n.

Dull, somewhat opaque black; antennae, legs, and abdomen very dark brown. It is to *C. lugubrina* that this species is more nearly related, but it is differentiated by the more rounded lateral posterior part of the pronotum, which is not angular, and the absence of a setigerous puncture on the 3rd interval. The rest as in *O. lugubrina*, but the three abdominal segments have a sulcus along the base. Seen two females.

Length, 14 mm.; width, 5 mm. Locality.—Cape (Cape Town).

# Cophosomorpha natalensis Boh. Descr. Cat., p. 563.

Locality.—Cape (Transkei); Zululand.

#### Cophosomorpha laetans sp. n.

Black, shiny, elytra slightly iridescent. Antennae, tibiae, and legs dark brown; head smooth, with the frontal impressions deep; pronotum arcuate laterally, with the posterior margin strongly reflexed, but as broad at the base as at the apex; the posterior angles slightly rounded; elytra elongate, with the humeral angles a little rounded; intervals moderately tectiform, the third with two punctures, the first at about a third of the length, the second at an equal distance from the apex as the first one is from the base; underside smooth, the two last abdominal segments with a distinct transverse sulcus running along the basal part of the segment.

This species is not unlike *C. natalensis*, and the shape of the pronotum is nearly identical; the elytra are less convex and the intervals less tectiform, and the two punctures on the 3rd interval, which are entirely absent in *C. natalensis*, are very distinct, and their disposition is quite different from those found in the other species of the genus when present. The transverse sulcus of the abdominal segments is very noticeable.

Length, 12 mm.; width,  $4\frac{1}{2}$  mm. Locality unrecorded.

# MACQUENA gen. n.

Facies more parallel than in the species of the two preceding genera; pronotum nearly parallel, or slightly attenuate towards the base, but not sinuate above the base and with the angles sharp; the rest as in Cophosomorpha.

- A<sup>3</sup>. Elytra with one puncture on the 3rd interval . . . . . intermedia
  A<sup>2</sup>. Elytra with two punctures on the 3rd interval.
  a<sup>2</sup>. Pronotum parallel, as broad at base as at apex. First puncture median, the other apical; striae of elytra punctulate . . . macroptera
  a<sup>1</sup>. Pronotum a little narrower at base than at apex, but straight laterally.
  b<sup>2</sup>. An ante-median and post-median puncture on the 3rd interval congener
- b<sup>1</sup>. A post-median and an apical puncture on the 3rd interval . castelli A<sup>1</sup>. Elytra without puncture on the 3rd interval . . . . . congruens

Macquena castelli sp. n.

Black, little shiny  $(\mathfrak{P})$  on the pronotum, opaque on the elytra; shape of the pronotum as in M. congruens; elytra parallel from the base to slightly past the median part; only very slightly ampliate about two-thirds of the length, and normally attenuate thence; the scutellary striole is very distinct, the intervals of the elytra are subtectiform, with the 7th strongly carinate in the anterior median part, and on the 3rd there is a puncture situated at two-thirds of the length, and another at a very short distance from the apex in a line with the apex of the 4th interval; underside and legs very shiny.

Length,  $15\frac{1}{2}$  mm.; width,  $4\frac{1}{2}$  mm.

Locality.—Basutoland (Giant's Castle Mountain).

Macquena congener Pér.

Suppl. Descr. Cat., p. 364.

Locality.—Transvaal (Lydenburg).

Macquena congruens Pér.

Descr. Cat., p. 562.

Syn: M. fraudulens Pér., Suppl. Descr. Cat., p. 364 (type).

Locality.—Transvaal (Lydenburg). The locality, Durban, Natal, is erroneous.

Gen. Mosuta gen. n.

The only species included in the genus is differentiated from the three preceding by the narrower and more linear shape; the pronotum is gradually attenuated from apex to base, where it is only half the width of the apex, without sinuation or reflexed margin in the posterior part; the number and disposition of the punctures on the 3rd interval differ from that of the other South African species of *Pterostichini*. The last three abdominal segments have a transverse basal groove.

Mosuta alticola Pér.

Suppl. Descr. Cat., p. 365.

Gen. Wahlbergia Tschits.

Ann. Mus. Zool. Acad. Imp. St. Petersb., 1896, p. 63.

In this genus the characteristics are more the shape than the divergence in other characters from Camptoscelis, Cophosomorpha,

Macquena, etc. The body is parallel, the base of the pronotum is as wide as the apex, and the elytra are of the same width and opaque; the outer margin is strongly reflexed; the intervals of elytra are all sharply or alternately carinate.

Wahlbergia inordinata Pér. Suppl. Descr. Cat., p. 365.

Not having any longer the type of this species, which I described as a *Cophosomorphus*, I am not quite sure that it should be included in this genus, but the description agrees with the characteristics of the genus.

Gen. TERATOTARSA Tschits. Descr. Cat., p. 566.

In this genus the three basal joints of the anterior tibiae of the male are exactly like those of the female—that is to say, not dilated or spongy underneath. The sex difference consists in the presence of two setigerous punctures near the border of the last abdominal segments in the female and of one in the male, as in all the Carabid species. The projection of the metasternum is plurisetose, whereas it is glabrous in the other genera.

The two species included in this genus have so far been met on the slopes of peaks or mountain ranges only.

# Teratotarsa minor sp. n.

Black, with the elytra semi-opaque, the antennal joints slightly rufescent and the palpi piceous; head of the normal shape and structure; pronotum a little attenuate laterally from the slightly ampliate median part towards the base, sub-sinuate above it, the base a little narrower than the apex, with the angles very sharp; disk with only a narrow impression along the basal angle, which is thus not much recurved; the median line and basal discoidal impressions are normal, and the fold of the outer margin is distinctly crenulate; scutellary striole distinct; elytra elongate ovate with the shoulders acute, somewhat plane for two-thirds of the length, with the intervals hardly convex in the median discoidal part, the convexity being more apparent laterally and in the posterior part; the 6th interval is carinate in the anterior part, but much less so than in S. severini or S. rugipennis; there is a deep puncture in the

centre of the 3rd interval almost at the top of the declivous part, and the series of deep punctures on the 6th stria is not interrupted, although the median ones are not as closely set as the anterior and posterior; legs and underside normal.

Length, 16 mm.; width,  $5\frac{1}{2}$  mm.

Locality.—Cape (Oudebosch, Caledon Div., slopes of mountain, height 1500 feet).

#### Barnardia gen. n.

#### Barnardia superciliaris n. sp.

Black, with the elytra nearly opaque, antennal joints somewhat rufescent, palpi piceous red; head smooth, clypeus very slightly plicate longitudinally; pronotum broader than long, and slightly wider at the base than at the apex; sides very moderately ampliate rounded from the base to about two-thirds of the length, a little sinuate thence to the basal angle, which is thus projecting and very sharp; disk nearly plane, but the base is broadly and equally depressed from side to side, the depression ascending a little laterally; the supralateral sulcus is merged in the depression and the outer marginal border is faintly serrulate; scutellary striole distinct, punctulate; elytra as wide at the shoulders as the median part of the pronotum. conspicuously punctate striate with the intervals plane on the dorsal part, 7th and 8th sharply tectiform, the former not conspicuously carinate in the anterior part; the series of larger punctures on the 8th are closely set and equi-distant; there is a 9th punctate stria, and even a distinct but vaguely punctate 10th stria, beginning at about the median part and reaching the apex; no puncture on the 3rd interval in the 3, but a distinct one in the 9; legs normal; underside finely but irregularly plicate. I have seen one of and four \$\Pi\$. Distinguished from the other species by the presence of a conspicuous thick frontal ridge extending from the clypeal suture to beyond the eye, and bordered by a deep, narrow frontal sulcus slightly sinuose behind and reaching the second punctigerous puncture; the punctation of the elytra differs also greatly from that of all the South African species of the group.

Length,  $17\frac{1}{2}$ -21 mm.; width, 8-9 mm.

Locality.—Cape (Oudebosch, Caledon Div., slopes of mountain, 1500 feet).

Named after Mr. K. H. Barnard of the South African Museum, who collected the specimens.

Gen. Ogmophora Tschits.

Hor. Soc. Ent. Ross., vol. xxxii, p. 20.

The facies of the species included in this genus is different from that of the others belonging to the group, in being more slender, owing to the pronotum being more distinctly rounded laterally, and especially towards the base, although not sinuate there, and the elytra having a more depressed appearance; the frontal sulci are longer and deeper, but the border formed thereby is not so much raised nor is it prolonged so far over the eyes as in *Barnardia*; the metasternal episterna are longer than broad on the anterior border, and in the only species of this genus the last three abdominal segments are grooved transversely at the base.

Ogmophora peringueyi, Tschits. Descr. Cat., p. 608.

This species has a wide habitat in South Africa, Cape (Cape Town, Hutchinson, Victoria West, Kimberley), Free State (Smithfield). An example in the Museum collection is labelled "Zambesi," but the record is most probably erroneous.

Gen. Chalcochrous Chaud. Bull. Soc. Nat. Mosc., vol. i, 1838, p. 24.

> Syn: Steropomorpha, Tschits. Descr. Cat., p. 561.

The distinctive character of this genus is the presence of a long, non-bifid tooth in the mentum as in the other species of Group II. The elytra have a bronze sheen in the two species known to me, and have no puncture on the 3rd interval.

Chalcochrous degener Pér. Descr. Cat., p. 561.

Syn: C. captatrix, Tschits. Hor. Soc. Ent. Ross., vol. xxxii, 1898, p. 139.

The shape of the prothorax greatly differs from that of *C. lenis*, and it may prove necessary to found a new genus for its reception.

I described the first example I obtained as black; but it has really a bronze sheen, not so conspicuous, however, as in other specimens I obtained later on, on the slopes of Table Mountain at only 600 feet altitude.

Locality.—Cape (Cape Town, Newlands).

Chalcochrous otiosus, Tschits.

Hor. Soc. Ent. Ross, vol. xxxii, 1898, p. 139.

3 piceous brown, upper part of body slightly bronzy, with a silky lustre; legs reddish brown; antennae reddish, with joints 2-6 more or less spotted with brown; palpi brownish, with the end of the last lighter.

This species is extremely closely allied to *C. lenis* Germ., but distinct. It differs in addition to the much more obscure coloration of the palpi, antennae, and legs, and the less bright bronze sheen of the surface of the body, firstly by the shape of the pronotum, which is distinctly wider, also of about equal length (1·2 as broad as long), with the anterior angles projecting although very feebly, whereas in *C. lenis* these angles are not projecting; the elytra are also wider, broader at the shoulders, narrower behind, and less elongate in proportion to the length (1·6 as long as wide), instead of 1·75 as in *C. lenis*. The head is a little less wide between the eyes, and slightly plicate in the only example I have, but this may prove to be an individual character.

Length, 12 mm.; width, 4 mm. Locality.—Cape of Good Hope.

I have not as yet identified this species.

### TRIBE PLATYNINI.

Descr. Cat., p. 567.

# Key to the Genera.

	Claws of tarsi normally No puncture on the 3rd tooth.		0 0	elytr	a.	Mentu	m with	ı a tri	angul	ar median
$C^2$ .	Median tooth short, blu	ntly	bifid						Lac	emosthenes
C1.	Median tooth long, sligh	itly	trunca	te at	tip					Enoicus
B1.	Three punctures on the	3rd	interv	al of	ely	tra.				
$C^2$ .	Mentum with a long me	ediar	tooth	, tru	nca	te or n	ot.			
	a². A scutellary stria									Platynus
	$a^1$ . No scutellary stria									Phimus

Angionychus

Gen. Laemosthenes Bonel. Descr. Cat., p. 571.

Laemosthenes complanatus Dej. Descr. Cat., p. 571.

A European species which does not seem to have retained a footing in South Africa beyond a small radius from the ports of entry. I have found it not uncommon in packages from Europe packed with straw, and I have repeatedly met with it in the Museum grounds.

Gen. Enoicus Pér. Descr. Cat., p. 581.

Enoicus fallax Pér. Descr. Cat., p. 582.

Misprinted Euleptus fallax.

Gen. Platynus Bonel. Descr. Cat., p. 572.

Key to the Species.
Sub-gen. Megalonychus.

- A<sup>2</sup>. Third interval of elytra with three punctures.
- B2. Intervals of elytra plane.
- C<sup>2</sup>. Pronotum elongate, not ampliate laterally. Facies narrower than in the following species. Elytra distinctly oblong . . . . . . . . oblongus
- C1. Pronotum ampliate laterally.
  - $a^2$ . Pronotum aciculate punctate over the whole disk.
  - b<sup>2</sup>. Pronotum twice as broad as long . . . . . latipennis

  - a¹. Pronotum aciculate or more or less roughly punctate, but the discoidal part smooth.
  - $b^2$ . Discoidal part of pronotum not plicate transversely convex; striae of elytra indistinctly punctate . . . . . . . . gilvipes
  - b¹. Discoidal part of pronotum slightly plicate transversely; elytra a little more parallel; striae less indistinctly punctate . interstitialis
- B1. Intervals of elytra strongly costate; striae distinctly punctate obsequiosus
- A<sup>1</sup>. Third interval of elytra with two punctures. Pronotum ampliate laterally.
- B<sup>3</sup>. Intervals of elytra carinate.

<ul> <li>C². Sides of pronotum broadly aciculate</li></ul>
Sub-gen. Anchomenus.
<ul> <li>A<sup>2</sup>. Pronotum punctate laterally, but with the disk smooth. Third interval of elytra with two punctures. Elytra broad, parallel, bronze green, tibiae black. Pronotum more distinctly attenuate towards the base latiusculus</li> <li>A<sup>1</sup>. Pronotum not aciculate or punctate laterally. Third interval of elytra with three punctures.</li> </ul>
B³. Pronotum sub-transverse cordiform.
C <sup>2</sup> . Pronotum moderately attenuate laterally towards the base.
$a^2$ . Black, legs red, outer margin of pronotum concolorous . rufipes $a^1$ . Elytra metallic green, pronotum and elytra with a yellow margin pauper
C <sup>1</sup> . Prothorax distinctly attenuate laterally towards the base; pronotum moderately elongate.
<ul> <li>a². Elytra metallic green; intervals smooth natalensis</li> <li>a¹. Elytra greenish red, intervals transversely impressed sub-tesselate</li> <li>diversus</li> </ul>
B <sup>2</sup> . Pronotum sub-elongate and cordiform.
C3. Elytra black, strongly costate; antennac and legs red; intervals of elytra convex; striae distinctly punctate striatitarsis
C <sup>2</sup> . Elytra black, moderately costate; antennae fuscous, except the three basal joints.
$a^3$ . Median part of pronotum slightly angular; striae not deeply punctate $laetulus$
$a^2$ . Median part of pronotum not angular; striae not deeply punctate $fallaciosus$
$a^{1}$ . Median part of pronotum not angular; striae conspicuously punctate $transvaalensis$
C <sup>1</sup> . Pronotum and elytra black, both with a broad flavescent margin.
$a^2$ . Pronotum distinctly attenuate laterally towards the base • capicola
a <sup>1</sup> . Pronotum not distinctly attenuate laterally towards the base . velox
B¹. Pronotum elongate, sub-hexagonal. Upper side green, opaque, elytra with a narrow yellow margin.
C <sup>2</sup> . Legs flavescent; knees not distinctly infuscate alacer
C <sup>1</sup> . Legs with the knees plainly infuscate gracilis

 $Platynus\ latipennis\ {\bf Boh.}$ 

Descr. Cat., p. 575.

Locality.—Natal (Durban). VOL. XXIII, PART 3.

Platynus gilvipes Boh. Descr. Cat., p. 574.

Locality.—Transvaal (Watervalonder). The locality "Salisbury," loc. cit., is erroneous.

Platynus interstitialis Boh. Descr. Cat., p. 574.

Syn: M. fraternus Pér., Suppl., p. 366.

Having seen a type of Boheman's species after my description of M. fraternus, I find the latter to be identical with it. The habitat "Salisbury" applies thus to M. interstitialis.

Locality.—Transvaal (Irene, Pretoria, Thabina in Zoutpansberg, Waterberg, Pietersburg); S. Rhodesia (Umtali).

### Platynus transvaalensis sp. n.

Closely allied to *P. fallaciosus*, with which it agrees in shape, size, and colouring, but the sculpturing of the elytra differs. The punctures of the striae, instead of being finely punctate, are much deeper, and impinged slightly in the dorsal part on the side of the intervals, which are there plainly costate for at least two-thirds of the length instead of being almost plane or very little costate, as in *M. fallaciosus*. Moreover, the dorsal part is distinctly depressed in *P. transvaalensis*.

Length, 7 mm.; width,  $2\frac{4}{5}$  mm.

Locality.—Transvaal (Johannesburg).

Platynus alacer Boh.

Descr. Cat., p. 578.

Locality.—Transvaal (Pretoria, Rietfontein in Zoutpansberg, Lydenburg, Watervalonder).

Gen. EULEPTUS Lac.

Descr. Cat., p. 579.

Euleptus caffer Boh.

Descr. Cat., p. 580.

Syn: E. elegans Pér., loc. cit., p. 580.

Locality.—Natal (Howick, Hilton Road, Pinetown, Newcastle); Transvaal (Florida, Rietfontein in Zoutpansberg, Lydenburg, Watervalonder).

Euleptus intermedius Pér.

Descr. Cat., p. 580.

Locality.—S. Rhodesia (Umtali, Sebakwe).

Euleptus albicornis Pér. Descr. Cat., p. 581.

Locality.—Eastern Transvaal (Zoekmakaar).

#### Pнімиs gen. n.

Mentum of Anchomenus, ligula broadening towards the apex, straight across the tip, but rounded laterally, paraglossae adhering to the ligula and very slightly longer; palpi of Anchomenus; pronotum transverse; elytra oblong, without scutellary striae; anterior and intermediate tarsi only moderately long; the joints of the former dilated in the male, the first not very much longer than the second (gilvipes), or a little longer, second and third short, fourth not smaller than the third; legs and tarsi not carinate.

#### Key to the Species.

- A<sup>2</sup>. Pronotum sub-parallel.
- B<sup>2</sup>. Upper side shining.
- C<sup>2</sup>. Upper side black, dorsal striae of elytra moderately deep . . . nanniscus
- C1. Upper side, especially the elytra, rufescent metallic . . . . harpaloides
- B¹. Upper side sub-opaque, bronze, with a silky sheen . . . namaquensis

Three of the species included in this genus (I placed two formerly in *Agonum* and one in *Laemosthenes*) have the general appearance of a Harpalid, but are at once distinguished by having two supra-orbital setae instead of one; the fourth species is not unlike an Abacetid.

Gen. Angionychus Klug. Descr. Cat., p. 583.

Angionychus lividus Klug. Descr. Cat., p. 583.

The pronotum is ampliate rounded and attenuate but not sinuate towards the base; the elytra have no scutellary striae.

Locality.—Natal (Isipingo).

A<sup>2</sup>. Tibiae spinulose outwardly.

#### TRIBE POGONINI.

Descr. Cat., p. 584.

The representatives of this tribe have two supra-orbital setigerous punctures.

### Key to the Genera.

B<sup>2</sup>. Median tooth of mentum long, bifid; elytra deeply punctured . Pogonus

	median tooth of mentum long, bind						
В1.	Median tooth of mentum short, striae	not	bifid;	elytr	a wit	hout	well-defined  Extromus
$A^1$ .	Tibiae not spinulose outwardly.						
	Median tooth of mentum bifid; four	r of fif	th elvt	ralstr	iae wl	hen pre	esent curved
						~	Trechus
B1.	Median tooth of mentum not bifid,						Perileptus
	Tiodadi Cootii oi incii in incii incii				. 50110	•	1 c. nopras
	Gen. Trech	aus (	Clairv				
	Descr. Cat	t., p.	587.				
	Key to the	e Spe	cies.				
A 2	Anterior tibiae not obliquely trunc	ate oi	itward	llv.			
	Elytra oblong. Elytra with three of				each:	side an	d two entire
	ones along the margin.				· ·	J240 411	a two circiro
C4.	Striae very deep, general colour che	estnut	5				mashunus
	Striae deep; body lesser size.						aterrimus
	Pronotum sinuate laterally .						monticola
	Striae fine, body larger size .						ambiguus
	Elytra oblong ovate.						
	Striae deep						solutilis
$C^2$ .	Elytra with six discoidal striae on e	each s	ide				agilis
	Elytra with five discoidal striae on						laetulus
	Elytra plainly ovate.						
$\mathbb{C}^2$ .	Elytra with six shallow discoidal st	riae;	interv	als pl	ane, o	ne dor	sal puncture
	on 3rd interval						
C1.	Elytra with six deep discoidal st	riae ;	inter	vals r	aised	; two	conspicuous
	punctures on 3rd interval .						. scitulus
$A^1$	Anterior tibiae obliquely truncate	outwa	erdly.				
$B^2$	. Elytra oblongo-ovate. Elytra with	n five	dorsal	striae	on ea	${ m ch\ side}$	. Posterior
	angles of pronotum not acute						. parilis
$B^{1}$	. Elytra oblong.						
			•				. $pallipes$
	Elytra with six dorsal striae on each				•		. rufipes
$C^2$ .	Elytra with seven dorsal striae, the	e four	th div	erging	goutv	vardly	
	apex		•		•		. vivax

C<sup>1</sup>. Elytra with seven dorsal striae, the fourth not diverging outwardly

gravis

#### Trechus mashunus sp. n.

Chestnut red, shiny, palpi, antennae, and legs testaceous. Closely allied to *T. aterrimus*, but a little more robust, and with the elytra less parallel; the latter have also three discoidal striae without any trace of a fourth, but the second reaches as far back as the first; the three are distinctly deeper than in *T. aterrimus*, and the intervals are more convex; the two striae above the outer margin are conspicuous.

Length, 4 mm.; width, 2 mm. Locality.—S. Rhodesia (Umtali).

#### Trechus monticola sp. n.

Piceous black, shiny, antennae fuscous with the first joint reddish; palpi and legs rufescent; head sulci very deep and strongly arcuate; pronotum ampliate cordate, a little broader than long, moderately attenuate but not sinuate towards the base; elytra oblong, each with three discoidal deep striae, the outer one of which begins at the anterior puncture but stops short of the declivity; hind sinus distinct.

Closely related to *T. aterrimus*, but smaller, and differing in the shape of the pronotum, which is shorter in proportion and more rounded laterally, and less attenuated towards the base; the legs are flavescent instead of deep fuscous.

Length, 3 mm.; width,  $1\frac{1}{5}$  mm.

Locality.—Cape (Hottentots Holland Mountains, Caledon Division, 4000 feet).

Trechus ambiguus Pér.

Descr. Cat., p. 589.

Colour and shape of *T. aterrimus*, but larger; the pronotum is proportionally more ampliated laterally; the disposition of the striae in the elytra are the same, but they are finer and shallower, and so are the two supra-marginal ones, which are, however, quite distinct. The type was described from an immature example.

Length, 5 mm.; width, 2 mm.

Locality.—Cape (Ceres district, Matroosberg, 3800 feet; Tulbagh, Great Winterhoek, 4000 feet).

# Trechus agilis sp. n.

Slender, elongate, pale, testaceous, with the head and pronotum redder, and an infuscate elongate sutural patch past the median part of the elytra; antennae infuscate, with the three basal joints rufescent; legs flavescent. Head with the sulci very deep; pronotum cordate, sinuate laterally, base half the width of the elytra and a little narrower than the apex; elytra elongate, oblong, but slightly ampliate past the middle, and having on each side six discoidal striae, the first three starting from near the base, the other three from a short distance from it; the juxta-sutural stria alone reaches the apex, the other four stop a little short of it, the sixth being still shorter; the apical sinus is indistinct.

Length,  $3\frac{1}{4}$  mm.; width,  $1\frac{1}{4}$  mm. Locality.—Cape (Clanwilliam).

Trechus pallipes Boh.

Descr. Cat., p. 589.

Locality.—Cape (Oudebosch, Caledon Division).

Trechus rufipes Boh. Descr. Cat., p. 589.

T. affinis Pér., loc. cit., p. 589.

Locality.—Cape (Uitenhage); S. Rhodesia (Salisbury).

Trechus vivax Pér. Descr. Cat., p. 590.

Locality.—Cape (Uitenhage); Natal (Malvern).

#### TRIBE BEMBIDIINI.

Descr. Cat., p. 591.

# Key to the Genera.

- ${
  m A}^3$ . Eyes moderate; anterior tibiae not obliquely truncate; no juxta-scutellary stria; number of striae seldom normal, and even reduced to one Tachys
- A<sup>2</sup>. Eyes entirely obliterated; body depressed . . . Scotodipnus

Gen. Bembidium Latr.

Syn: Peryphus Meg. Descr. Cat., p. 591.

Bembidium variegatum Boh.

Descr. Cat., p. 592.

Locality.—Nearly the whole of South Africa, except a few south western districts of the Cape.

Bembidium sobrinum Boh.

Descr. Cat., p. 592.

Boheman's description leaves no doubt as to the shape of the pronotum being the same as in *B. variegatum*, the only difference being the livery of the elytra being dull greenish bronze with a narrow apical transverse flavescent band. This livery I have only seen, however, in *B. diversum*, the pronotum of which is plainly angular laterally in the middle.

# Bembidium diversum sp. n.

In size this species closely approximates *B. variegatum* except for the shape of the pronotum, which instead of being ampliate rounded (not slightly angular as stated, *loc. cit.*) laterally towards the middle, is there plainly angular and even acute; the livery of the elytra, instead of being more or less green tessellated with yellow elongate patches, or yellowish dotted with green spots, is dull-green except towards the apex, where there is a narrow yellow border ascending the margin for a short distance. This livery approximates very closely that of *B. sobrinum*, as stated above.

Length, 4 mm.; width,  $1\frac{1}{2}$  mm.

Locality.—Cape (Dunbrody); Mozambique (Rikatla).

Gen. TACHYS Sch.

Descr. Cat., p. 593.

- A<sup>2</sup>. Discoidal striae beginning at or near the base.
- B<sup>2</sup>. No deep impression on each side of the base.
- C<sup>6</sup>. Elytra with eight striae on each side; striae normal, lateral ones seriate punctate; body light testaceous . . . . . . . . . . . emeritus

· ·
C <sup>5</sup> . Elytra with six discoidal striae, the outer one interrupted at both ends; body somewhat robust; bronze green, with a faint posterior reddish patch
crassiusculus
C4. Elytra with six discoidal striae of equal length and depth, body more slender, light testaceous
C3. Elytra with six discoidal striae, the sixth ill-defined, eighth obliterated,
iridescent pale reddish, with a broad median transverse fuscous band on the elytra
C <sup>2</sup> . Elytra with five discoidal striae. Striae of equal length, fifth distinct;
elytra with two longitudinal yellow bands on each side invictus
Striae of equal length, fifth less distinct; testaceous, with discoidal part of
elytra fuscous, iridescent
C¹. Elytra with five discoidal striae, but the fifth faint, and disappearing beyond the basal part; testaceous; discoidal part of elytra iridescent.
a <sup>2</sup> . Antennae fuscous
a <sup>1</sup> . Antennae wholly flavous, size smaller
B1. Elytra with a deep, often conspicuous impression on each side of the base.
C <sup>2</sup> . Impression shallow, elytra oblong.
a <sup>2</sup> . Elytra with five discoidal striae, body black vescus
a1. Elytra with four discoidal striae; head and pronotum black; elytra
flavescent, with a narrow black border gratus
C¹. Impression deep; elytra oblongo-ovate or oblong.
a <sup>2</sup> . Elytra with five discoidal lines; elytra oblongo-ovate, convex, body
testaceous red secutorius
a <sup>1</sup> . Elytra with four discoidal striae.
b4. Elytra with the discoidal striae smooth, the third short, the fourth shorter,
not produced beyond the two dorsal punctures, body black capicola
$b^3$ . Elytra with the discoidal striae smooth, second and third short and of
equal length, fourth longer spurius
$b^2$ . Elytra with the discoidal striae punctulate, third and fourth of nearly
equal length and only a little shorter than the second, which reaches
the declivity
b <sup>1</sup> . Elytra very convex, third stria not punctured; a fourth very short,
sometimes sub-evanescent basal stria fartus
A <sup>1</sup> . Discoidal striae, not beginning at the base, except the first.
B <sup>3</sup> . Elytra with three discoidal striae.
C4. Elytra with the third striae reaching only the two punctures, eighth stria
present; colour black, iridescent faustus
C <sup>3</sup> . Elytra with a supra-apical well-defined yellow patch khoinus
C <sup>2</sup> . Elytra with the discoidal striae hardly defined and evanescent past the median
part; piceous black, shiny
B <sup>2</sup> . Elytra with two discoidal striae.
C <sup>6</sup> . Pronotum cordate; elytra slightly ampliate; elytra with two rufo-flavescent
patches on each side. $a^2$ . Elytra somewhat convex behind: striage deeply punctured . apicalis
J 1 1 1 1
a <sup>1</sup> . Elytra nearly plane, striae less deeply punctate imitans

C5.	Pronotum less or not cordate, elytra not ampliate.
	a <sup>3</sup> . Red, with a broad fuscous band extending from side to side moestus
	a <sup>2</sup> . Piceous, elytra with a longitudinal yellowish band, and an elongate
	ovate patch towards the apex
	a <sup>1</sup> . A small posterior reddish patch on each side crassescens
C4.	Pronotum more cordate; antennae infuscate, legs flavescent . exiguus
$C^3$ .	Pronotum less cordate, antennae and legs black agatinus
$C^2$ .	Pronotum transverse, distinctly sinuate laterally; elytra depressed, striae
	smooth; colour stramineous; antennae normally filiform . arrogans
C1.	Pronotum rounded, not distinctly sinuate laterally; elytra less depressed,
	striae smooth, colour flavous, antennal joints not filiform . cautus
$B^{1}$ .	Elytra with one discoidal stria.
$C^2$ .	Five ultimate joints of antennae whitish.
	a <sup>2</sup> . Elytra strongly ovate, with humeral angles strongly projecting.
	$b^2$ . The juxta-sutural line and a short sub-humeral stria very fine; an
	occasional round yellowish patch on each side of the posterior part of
	the elytra; antennae slender humeralis
	$b^1$ . The juxta-sutural stria and sub-humeral line deeper and longer;
	antennae slender optimus
	$a^{1}$ . Elytra oblongo-ovate, with the humeral angles not projecting; juxta-
	sutural line deep, no sub-humeral stria; antennae not slender
	sebakwens is
C1.	Antennal joints concolorous.
	a <sup>2</sup> . Elytra oblong or oblongo-ovate; concolorous.
	b4. Elytra oblongo-ovate, body somewhat robust, stria quite distinct, also
	the posterior sinus humilis
	$b^3$ . Elytra oblongo-ovate, body less robust nanniscus
	b <sup>2</sup> . Elytra oblong, body very minute, stria distinct, posterior sinus
	evanescent pusillimus
	b <sup>1</sup> . Elytra oblong, body very minute, stria less distinct . minutissimus
	a <sup>1</sup> . Elytra very ampliate, two distinct yellow patches on each side dives

# Tachys emeritus Pér. Suppl. Descr. Cat., p. 36).

Pale testaceous, with the antennae and palpi light flavescent; head smooth, eyes bulging; prothorax transverse, a little attenuate and slightly sinuate from the median part towards the base, with the angle sharp, smooth, with a distinct longitudinal impression, the basal one deep and smooth; elytra oblong, and having eight punctate striae with the first four intervals, the 3rd especially, somewhat tectiform; the 1st stria reaches from the base to the apical sinus; the others begin equally at the top of the basal depression, and reach the top of the posterior declivity; the 6th and 7th are continued a little further as a series of deep punctures; the two dorsal punctures

on the 3rd interval are very distinct. In the original description I mentioned five striae only.

Length, 1¼ mm.; width, ¾ mm. Locality.—Cape (Enon, Dunbrody).

Tachys crassiusculus Pér.

Descr. Cat., p. 594.

Locality.—Transvaal (Shilouvane, Pietersburg); S. Rhodesia (Sebakwe).

Tachys migrator Fauv.

Descr. Cat., p. 595.

Locality.—Cape (Stellenbosch, Dunbrody).

#### Tachys invictus sp. n.

Metallic green, shiny; the five basal antennal joints, palpi, and legs flavescent; head normal, sulci short; pronotum broad, wider than long, attenuate rounded laterally in the anterior part, very little behind and hardly sinuate above the sharp, slightly projecting outer angle; elytra oblong, a little wider than the base of the pronotum, shoulders somewhat rounded and having each five discoidal somewhat deep striae, the juxta-sutural of which alone is entire; two and three begin at the base, four and five at some distance from it, and all four stop short of the declivity, the second being, however, more prolonged; hind sinus very distinct; each elytron has a yellow elongate supra-humeral band extending from the outer margin to the fifth discoidal stria, and reaching from near the base to about the median part of the length, and a broader one beginning along the outer margin at about the second third of the length, and extending on the discoidal part as far as the apex of the striae, and reaching posteriorly the suture below the second discoidal stria.

Allied to *Tachys crassiusculus* Boh., and of the same build. The pronotum is a little longer, there are five discoidal striae instead of six, and the yellow markings of the elytra are very distinct. Occasionally a faint reddish-yellow patch in the posterior part of the elytra is discernible in *T. crassiusculus*.

Length,  $3\frac{1}{4}$  mm.; width,  $1\frac{1}{2}$  mm. Locality.—Natal (Isipingo).

#### Tachys umtalensis sp. n.

Not unlike *T. precarius* in general appearance and likewise wholly testaceous, but there are five discoidal and deeper striae on each side of the elytra instead of six. On this account it approximates *T. caffer*, but the antennae are wholly flavescent instead of being infuscate; the first discoidal stria is deeper, second and third shorter; the size is about one-third less than *T. caffer*.

Length,  $2\frac{1}{2}$ – $2\frac{3}{4}$  mm.; width, 1– $1\frac{1}{4}$  mm. Locality.—S. Rhodesia (Umtali).

> Tachys vagans Pér. Descr. Cat., p. 596.

Locality.—Transvaal (Kaapmuiden, Komati Poort).

Tachys faustus Pér. Descr. Cat., p. 596.

Locality.—Natal (Malvern); Transvaal (Weltervreden); Bechuanaland (Ramoutsa); S. Rhodesia (Umtali, Livingstone).

# Tachys khoinus sp. n.

Black, shiny, antennae long, joints elongate, black with the first two flavescent; palpi black; prothorax broadly cordate, distinctly sinuate above the base, the angle of which is sharp and smooth, longitudinal transverse basal impressions normal; elytra oblong, and having in the posterior part a transverse flavous patch; each elytron has three deep, smooth striae, the first one entire, the second begins at some distance from the basal impression and reaches the declivous part opposite the hind margin of the apical patch, the third begins at the first puncture and is continued beyond the second; the eighth stria is entire and very deep, especially near the shoulders.

Length,  $2\frac{1}{4}$  mm.; width,  $1\frac{3}{5}$  mm. Locality.—Cape (Clanwilliam).

# Tachys shiluwanus sp. n.

Black, iridescent; antennae and legs infuscate. Very closely allied to *T. faustus* and easily mistaken for this species, but the iridescence is stronger, the depression along the suture is very marked,

and the second and third striae, which are not so deep as in *T. faustus*, reach the rounding of the hind declivity.

Length,  $2\frac{1}{4}$  mm.; width,  $1\frac{2}{5}$  mm.

Locality.—Transvaal (Pietersburg, Shilouvane).

#### Tachys moestus sp. n.

Red, with a broad fuscous band on the elytra occupying about one-third of the area and extending from side to side; elongate-oblong, antennae, legs, and palpi flavescent; head normal; pronotum transverse, slightly attenuate sinuate laterally towards the base but not cordiform; elytra deeply impressed at the base and bearing each two discoidal deep striae, the first of which is entire, but the second begins at one-fifth of the length and reaches slightly further than the top of the declivity. More parallel than *T. imitans*, the livery of which it approximates; it is easily distinguished by its much smaller size, and by the pronotum being broader and less attenuate laterally towards the base.

Length, 2 mm.; width,  $\frac{3}{5}$  mm. Locality.—Transvaal (Kaapmuiden).

Tachys exiguus Boh. Descr. Cat., p. 598.

Locality.—Cape (Cape Town, Beaufort West, Clanwilliam).

# Tachys agatinus sp. n.

Black, very shiny, antennae and legs deep black, somewhat robust. Allied to T. exiguus, which it closely resembles, but is distinguished by the deep black antennae and legs; the pubescence on the joints of the former is long and greyish; the shape of the pronotum and elytra is alike, and the latter has also two discoidal striae, but in T. agatinus the second stria is shorter than in T. exiguus, beginning only slightly above the first discoidal puncture and reaching only the top of the hind declivity.

Length, 2 mm.

Locality.—Cape (Tulbagh, 4000 feet).

Tachys humeralis Pér. Descr. Cat., p. 599.

Syn: T. servilis Pér., Suppl. Descr. Cat., p. 370.

Locality.—S. Rhodesia (Umtali).

Tachys optimus Pér. Suppl. Descr. Cat., p. 370.

Locality.—S. Rhodesia (Salisbury).

#### Tachys sebakwensis sp. n.

Black, shiny, antennae fuscous with the five apical joints whitish, legs flavescent with the tibiae slightly lighter; head of normal shape; pronotum regularly ampliate rounded, but slightly angular in the middle and a little narrower across the base than at the apex; elytra oblong, with the base nearly straight and the humeral angles sharp, but not projecting; the juxta-sutural stria is deep and smooth, and so is the posterior sinus; the eighth stria is equally deep.

This species is easily recognised from the other two South African species in which the apical joints of the elytra are whitish—i.e. T. humeralis and T. optimus—in the greater thickness of the antennal joints, the five joints of which, instead of six, are white, in the much more ampliated pronotum, the less ovate elytra, the not acuminate humeral angles, and the more robust facies.

Length, 3 mm.; width,  $1\frac{1}{2}$  mm. Locality.—S. Rhodesia (Sebakwe).

> Tachys humilis Pér. Descr. Cat., p. 599.

Syn: T. debilis Pér., Ann. S. Afr. Mus., vol. v, 1908, p. 295.

Tachys pusillimus Pér. Descr. Cat., p. 599.

This species was not recorded from Salisbury, as stated by me (loc. cit.).

# Tachys dives sp. n.

Piceous black, shiny, antennae and legs flavous; head of the normal shape, with the eyes very bulging; antennae pale flavescent with the basal joint darker; pronotum broadly ampliate, sub-orbicular, one-fourth broader than long, not sinuate towards the base, which is equal in width to the apex; elytra slightly more than twice the width of the pronotum at its widest part, oblong, with the shoulders slightly sloping but with the angles distinct; the juxta-sutural stria

is smooth and reaches from a distance from the base to the apex; the posterior sinus is strongly marked, and so is the eighth stria; on each side are two very distinct yellow patches, the anterior a little larger and more quadrate than the posterior one, which is rounded but a little transverse; the fore tibiae are of the normal shape, but somewhat ampliate above the supra-apical spinose angle.

The ampliate shape of the pronotum and elytra in proportion to its length is a feature peculiar to this South African species.

Length, 3 mm.; width,  $1\frac{1}{5}$  mm.

Locality.—Transvaal (Kaapmuiden).

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